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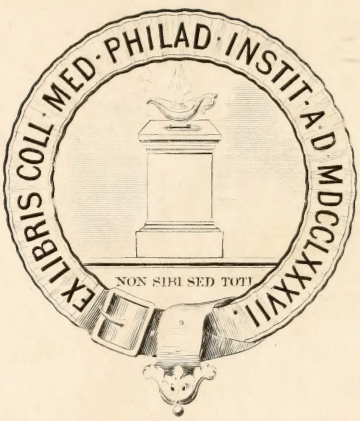

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A Semi-Monthly Journal of Medicine and Surgery.

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VOLUME VI.

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DETROIT, MICHIGAN.
GEORGE S. DAVIS, PUBLISHER.
1888.

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The Medical Age.

Vol. VI. DETROIT, JAN. 10, 1888. No. 1.

Original Articles.

QUININE AND ALCOHOL IN THE TREATMENT OF FEVER.

BY W. A. DICKEY, M. D., TIFFIN, OHIO.

In these days of skepticism in religion and politics, it will probably not be a matter of surprise if an occasional doubting Thomas is found in the ranks of the medical profession, concerning the use of some of our time-honored drugs. My limited observation has led me to believe that no two drugs in the materia medica are more thoroughly abused than the two spoken of in this article. There are physicians without number who, when called to a case of fever, of whatever name or kind, commence by giving large doses of quinine (and soon the alcohol is added) without any regard to the patient's condition—simply because they must give something and it is recommended. This is kept up with but slight variation, save in the size of the dose, which is usually increased, until the patient, either perforce of a good constitution, recovers in spite of the treatment, or worn out by the disease and his heavy doses, or both, goes where quinine is not needed, and alcohol is not used either for preserving pathological specimens or to strengthen the human economy.

I am aware that anyone who raises his voice or pen, even though it be in a feeble manner, against what he sees written in books and is daily recommended by the majority of physicians, subjects himself to severe criticism and ridicule. But this should not deter one from speaking his honest convictions.

That these drugs are good in their place, and that they have a specific sphere, no one will probably deny; nor would any one have them banished from the physician's armamentarium. But they are a two-edged sword, capable of cutting both ways. Quinine is, indeed, a boon to suffering humanity, more especially in those districts intensely rife with malaria (whatever that may be). But in the so-called continuous forms of fever, we can see no good, sensible reason for giving it; in fact we are quite firmly convinced it does harm, more especially in the large or antipyretic doses and even in much smaller doses administered, as it often is in typhoid fever, three or four times a day. In large doses it undoubtedly weakens the heart's action by its paralyzing effect on the vaso-motor centres, as well as by its action on the motor ganglia and the heart muscle itself, and no doubt to a greater or less degree on the heart's intrinsic ganglia upon which the movements of that organ so much depend. As a result the action of the organ is deranged, becomes unsteady and uncertain and its power diminished. Now, it is just upon this nervous mechanism (as well as the muscular system generally, diminishing its elasticity) that exalted temperature or any poisonous material that may be circulating through the blood, spends its force. PROF. LOOMIS, of New York City, in an able paper read before the Medical Society of the County of New York, on the "Causes of Death in Acute Pneumonia," uses substantially this language: "Is it not reasonable to suppose that the cause of death in pneumonia, in a large proportion of cases, is acute insufficiency of the heart, caused by the derangement of the vaso-motor system and of the cardiac ganglia, produced either by the direct action of a morbific agent in the blood upon the medullary center, or upon the ganglia in the heart wall, or, as is most probable, by both?"

For our present purpose it matters little whether it is the "morbific agent" spoken of, or high temperature, or what not, the result is the same—a general depression of the nervous system. Again this same author says: "Taking the ground that the failure of nerve power may show itself at the very onset of a pneumonia and that the heart may commence to stagger at the very commencement of the attack, it is evident that the effect of the local pneumonic change is to increase the elements of heart failure." It is this "element of heart failure" against which we have to contend, and to overcome which we have to direct our best energies. It is probably not a matter of surprise then that we have so much depression and symptoms of collapse, following the administration of antipyretic doses of quinine in pneumonia, typhoid fever, scarlatina and other febrile diseases of similar character. That continued hyperpyrexia is dangerous to life, no one capable of speaking with any degree of authority will deny; but, in these days of tepid and cold baths, cold pack, antipyrine and antifebrine and other potent remedies for reducing temperature, such large doses of quinine seem to be unwarranted and out of place,

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and are only adding another element of danger to the one already existing, and in place of assisting the heart to throw off the heavy load under which it is laboring we only add to its embarrassment. Even in small or average doses, I can see no good reason for giving quinine in typhoid fever and a large proportion of cases of pneumonia. It deranges digestion, prevents assimilation and causes an intense ringing in the patient's head, that, to say the least, does not contribute to his comfort or well-being. The tissue-waste and retrograde metamorphosis about which we hear so much in these cases, is very frequently caused by the want of proper assimilation of well-digested food, brought about, primarily, by the administration of quinine. What the majority of these cases need most is plenty of fresh air, and good nutritious food given at proper times and stated intervals. Speaking on this subject of tissue-waste and the administration of quinine, DR. DUVEY, of Missouri, pays his compliments to that class of physicians who are constantly prescribing this "therapeutical despot," in the following terse language: "I hear a great deal about tissue-waste from high fever. I doubt not this is the tendency of long-continued high temperature. But the fact is that a gallon of sweet milk will prevent more tissue-waste than an ounce of quinine." To this allow me to add, "and a gallon of whisky beside."

From a somewhat careful examination of the physiological action of alcohol as ascertained by able investigators, men whose long and varied experience in this line of work qualifies them to speak with authority, I have long been convinced that a large amount of the whisky used in the treatment of fevers, does the patient more harm than good. With the moral or so-called sentimental side of this question this article shall have nothing to do; it is only its physiological and therapeutical effects, its application to the treatment of disease, of which I shall speak.

Alcohol (and by this I mean all liquids in which it is found) when taken in the mouth roughens and corrugates its mucous membrane and produces something of an anæsthesia. It has the same effect on the mucous membrane of the stomach. It does this by its special affinity for albumen and water. When taken into the stomach, except in small doses, it precipitates the pepsin, thereby preventing the proper digestion of food. It is rapidly absorbed and circulates through the blood and tissues. I know of no observer who claims that more than an ounce and a half of alcohol can be taken in twenty-four hours, without appearing *unchanged* in all the fluids of the body.

GREBE has shown (and his observations have been confirmed by others) that in fevers the red blood corpuscles are diminished in numbers. Now if alcohol has this special affinity for water and albumen, and circulates through the blood and tissues unchanged, it is plain to be seen that it would have a very deleterious effect on the liquor sanguinis as well as the red blood corpuscles. The latter are almost always found roughened and broken down, and as a result, unable to carry their normal amount of oxygen. Add to this crippled condition of the corpuscles the fact that their number is decreased in fevers, and it would follow as a logical deduction that in those diseases in which we have a tendency to coma, the alcohol would only tend to deepen it. It is just in this class of fevers that the greatest amount is used. And what can not be forced into the unoffending stomach is applied to the skin in the shape of a bath.

That veteran teacher and writer, DR. N. S. DAVIS, of Chicago, in speaking on this subject says: "It is now thirty-five years since I commenced the direct clinical study of the effects of alcohol as a remedial agent. I have used the sphygmograph and all other means of testing the strength of the heart and the efficiency of the circulation in every variety of low forms of febrile disease coming under my observation, and I have never found any instance in which it increased the cardiac force or the efficiency of the general circulation." No one will question DR. DAVIS' authority to speak on any subject in which the results of a long clinical and experimental research are involved, for he certainly has had ample opportunity for both. DR. MITCHELL, of Cincinnati, in an article that appeared some time ago in the Clinic and Lancet, says of the indiscriminate use of alcohol in the treatment of pneumonia "that it is unscientific and culpable."

But you ask, is not alcohol a cardiac stimulant? It is within certain limits. Those "certain limits" are somewhat hard to define. That it is not a cardiac stimulant, but, on the contrary, a paralyzer of the heart, and cardiac ganglia and vaso-motor system of nerves, in much smaller doses than is usually supposed, has been amply proven. The fact is, the heart loses its power to sustain its rythmical action just in proportion as you increase the number of its pulsations.

The experiments of PROFESSOR MARTIN, of the Johns Hopkins University, Maryland, than whom we have no more careful observer or painstaking investigator, has proven this, as have also those of RINGER and SAINSBURY. These latter experimenters in closing their report of experiments on the action of alcohol on the heart of the frog (see Journal of the American Medical Association, Vol. I, page 279,) make use of this language: "That by their direct action on the cardiac tissues these drugs are clearly paralyzant, and this appears to be the case from the outset, no stage of increased force of contraction preceding." PROFESSOR MARTIN, in speaking of the action of alcohol

on the heart of the dog, said (see Jonrnal of the American Medical Association, Vol. I, page 307,): "Blood containing one-fourth per cent., by volume, of absolute alcohol almost invariably diminishes within a minute the work done by the heart; blood containing one-half per cent. always diminishes it, and may even bring the amount pumped out by the left ventricle to so small a quantity that it is not sufficient to supply the coronary artery." It is plain to be seen then that in "small doses" it acts by direct stimulation of the cardiac ganglia, and heart muscle, which they paralyze if given in large doses, and, as I have said before, it at the same time paralyzes the vaso-motor centres.

The size of the dose, then, is an element in its therapeutical application. Bearing in mind those well-known facts, how will those physicians who indiscriminately give from half a pint to a pint and a half of whisky in twenty-four hours to a fever patient, reconcile their treatment?

At the last meeting of the Virginia State Medical Society, Dr. Hunter McGuire, of Richmond, confessedly one of the ablest surgeons in the South, said that long ago he had ceased to give alcohol to a patient about to undergo a surgical operation, more especially a prolonged one, from the fact that the depressing effect of alcohol added to the depressing effect of the anæsthetic, seriously jeopardized the life of the patient. If it will produce such a depressing effect when administered to one in conjunction with an anæsthetic, why would it not, at least in as marked a degree, when administered to a fever patient whose heart and nervous system are laboring under the combined weight of some poison in the blood as well as an intense fever?

There is much more that could be said concerning the abuse of alcohol in the treatment of fevers, but if in this fragmentary manner I shall have called the attention of a large number of professional men to this important matter my object will have been accomplished.

SUBPERIOSTEAL RESECTION OF A RIB FOR EMPYEMA IN CHILDREN; RECOVERY.*

BY ALBERT B. STRONG, M. D., OF CHICAGO, ILL.

I have within the past two years made subperiosteal resection of a segment of a rib for empyema in two young persons, one a boy of six and the other a youth of seventeen years of age. The results have been so satisfactory that I desire to place the cases on record at the present time, particularly so, since able authority has recently condemned the operation in children.†

Case 1.—In May, 1886, I saw in consultation with Dr. Charles Venn, of this city, a boy six years of age. The father, mother and other children of the family were perfect pictures of health. The boy was large for his age, and up to his present illness had always enjoyed the best of health. Four weeks prior he began to cough, and eight or nine days later evidences of an effusion into the right pleural cavity were manifest. In spite of appropriate constitutional and local treatment, the effusion increased, and when I saw him the chest cavity was completely filled. The boy was much emaciated with continued fever and night sweats.

A hypodermic needle thrust into the chest just above the eighth rib in the axillary line, revealed the presence of pus. Under ether the eighth rib was exposed through a parallel incision two inches in length. The periosteum, midway between the upper and lower border of the rib, was split in a longitudinal direction, the distance of an inch. By means of a blunt hook the periosteum and intercostal vessels were easily peeled off from the posterior surface of the rib, and three-fourths of an inch was cut away with bone nippers. This was done without wounding the intercostal vessels or pleura. Next the internal layer of the periosteum was split to the same extent, and parallel to the external layer. The pleura was opened, when two quarts of laudable pus were evacuated. The chest cavity was immediately washed out with a warm saturated solution of boracic acid, and a large rubber drainage tube retained in position.

The subsequent history was uneventful. He began to improve at once. The chest cavity was daily washed out with simple warm water. A wad of oakum was placed over the wound. The tube pas kept in place six weeks, when the lung was entirely expanded and the wound healed completely. Now, sixteen months after the operation, the boy is perfectly well. The right chest is normal like its fellow, in shape and function. There is but a small scar at the seat of operation, and the rib has perfectly reformed in direction and shape.

Case 2.—Norwegian boy, seventeen years of age, always delicate, very thin and poorly nourished; six feet tall, pale and anæmic. Father, brother and one sister died of consumption. Mother alive and doing well. Patient was first taken sick about March 10, 1887. The symptoms and signs indicated pleural pneumonia of the lower lobe of the right lung. In a few days he was convalescent.

On March 24 he had a relapse, and the right chest slowly and intermittingly filled with effusion. He had night sweats, diarrhœa and cough, and a temperature of 102° to 104° F. On April 24, about five weeks from the commencement of the effusion, empyema being diagnosed

* Read before the Chicago Medical Society.

† See an article by Dr. Garnett, of Washington, on "The Surgical Treatment of Suppurative Pleuritis of Children," published in the Journal, Sept. 17, 1887.

by the hypodermic syringe, with the assistance of Dr. Venn, I removed subperiosteal, one and one-half inches of the 9th rib in the axillary line. Four quarts of laudable pus escaped. At the last about four ounces of clear serum passed out. Immediately washed out the chest cavity with a hot solution of boracic acid, introduced two large parallel rubber tubes with a drainage diameter of three-eighths of an inch each. These were held in position by a rubber shield and elastic bandage around the chest. The pleura was felt to be about three-fourths of an inch thick. During the next few days there were washed out large masses of lymph. Hot water injections of two quarts at a time were used, night and morning. A wad of oakum was kept over the opening and changed often. The diarrhœa, sweating and cough began immediately to abate. The temperature in three days dropped to normal. On the first day of May, eight days after the operation, the tubes were crowded out. All the unfavorable symptoms had disappeared, he was eating and sleeping well. The opening on the inside was closed, as I then thought by the expansion of the lungs; I subsequently learned it was closed by the arching of the diaphragm. The tube was left out five days, when the temperature began to ascend, and soon reached 104°. There was a return of the sweating, diarrhœa and cough. Nothing had escaped from the wound in the meantime. I then reopened the wound and washed out about five ounces of stinking pus and débris, passed a large Van Buren urethral sound into the chest, and ascertained that the lung was compressed into a small wad against the vertebral column. It had not expanded a particle. I felt the apex of the sound in the chest above the clavicle. Reintroduced longer, fenestrated drainage tubes, three inches in length. From this time on his convalescence was uninterrupted. Temperature quickly became normal and did not again rise. He soon began to go out of doors and improved rapidly. On June 12, three weeks after the tubes were reintroduced, my notes read: Boy has gained ten pounds, out of doors most all day. Eats enormously and digests it well. No cough and but little discharge. The sound in the chest shows the lung has not expanded. Put in drainage tubes without fenestra, since granulations had crowded into the former tubes so as to nearly occlude them. Sent the boy to a farm near Whitewater, Wisconsin, with instructions to keep the tubes in position, and syringe out the cavity once a day with warm water that had been boiled. Ten weeks later, on August 25th, he returned looking altogether different. Was twenty pounds heavier than when first taken sick, and expressed himself as never feeling better in his life. The tubes had remained in place until a few days before, when they had been crowded out and could not be reintroduced. Physical examination showed the lung expanded with good motion of the chest and vesicular murmur throughout. In a few days more the opening entirely healed and the boy left for Norway, perfectly recovered; six months from the commencement of his illness and four months wearing the tube.

It is only within a few years that surgeons have been bold enough to make a section of a rib for empyema. It is, perhaps, but natural that the operation should be condemned by those who have always used the trocar or incision. To oppose the operation on purely theoretical grounds and conclude that it is a grave and serious operation, is, I believe, contrary to the facts in the published cases.

In the article alluded to in the commencement of the paper, we find a table by a London writer of thirty-four cases of empyema, treated surgically, occurring in children of from 1 to 10 years of age. Of the number seventeen recovered after a short section of one rib had been made. The average time of recovery was seven weeks.

Dr. Garnett reasons that had these cases been treated with the trocar and drainage tube they would in all probability have recovered equally as well. Here is what he says against exsection: "When we consider the fact that the bony fabric of the chest is still in a condition of progressive development, the rapid and excessive deposit of callus following the solution of continuity of a rib protruding into the cavity of the chest, irritating the lung, the inevitable disparity and loss of symmetry in expansion of the two sides of the thorax, the growing condition of the child, which necessarily adapts itself to the physical results of the traumatic interference, establishing often a permanent deformity, associated at times with more or less spondylitis, and greatly restricted respiratory capacity of the chest, the pouch of periosteum from which the excised piece of rib has been dissected, the protracted healing and long-continued dressing of the open wound augmenting the chances of septicæmia, and exhausting the vital energies and recuperative resources of the little sufferer, we should hesitate before resorting to so grave a surgical procedure when a more simple and conservative one can be safely and successfully practiced."

Such conclusions, I think, should not go unchallenged. One does not find them from a careful study of these cases. The simple questions that I should like to invite your discussion upon is: Is subperiosteal cutting away a short segment of one rib, with modern surgical treatment, liable to be followed by such grave consequences as the writer referred to would have us to believe? Free drainage in abscess cavities is the imperative rule at the present

day. This is best obtained by making a patulous opening larger than is possible to make between the ribs. In my first case the rib has completely reformed. In the second it is growing again. In neither case did callus injure the lung. In both cases lung expanded and chest motion and shape are perfect. Septicæmia present in both cases, was quickly cut short by free irrigation, only possible through a large opening.

I would therefore conclude that in these two cases, section of the rib at least added nothing to the gravity of either case.

CHICAGO MEDICAL SOCIETY.

The President, Wm. T. Belfield, M. D., in the chair.

Dr. E. Fletcher Ingals reported a case of

RETROPHARYNGEAL ABSCESS.

The following is one of unusual interest on account of the deep fistulous tract which remains, and as an illustration of the necessity for prompt incision for the evacuation of pus in cases of retropharyngeal abscess.

Mrs H. P., æt. 44, was sent to me during the month of August from a neighboring State for an opinion. She complained of an oppressive, purulent discharge from the pharnyx, with more or less pain between the shoulders, cough and night-sweats. She stated that the discharge would occur every few days, and that afterwards she would be free from cough, pain or other annoyance for some time, when the symptoms would again come on gradually and increase steadily until another evacuation of the pus occurred.

Six months before coming to see me she had been attacked by soreness and swelling in the naso-pharynx. The swelling had gradually extended downward, causing more or less difficulty in swallowing and respiration, and had been allowed to take its course for two months, when an opening was made in the lower part of the pharnyx which gave vent to a large quantity of offensive pus. Subsequently the incision closed, was reopened twice, and finally it had remained patent. While the swelling was still in the naso-pharynx she had for some time also a purulent discharge from the right ear. I found the patient anæmic, weak and emaciated, weight only 94 pounds, instead of 112 pounds when in health. Pulse 132. Tongue red and glazed in centre, but the appetite good. The cough was not constant, but it usually troubled her considerably every day. The pains of which she complained were not severe and were confined to the chest and shoulders.

Upon examining the chest I found no abnormal signs excepting slight feebleness of the respiratory sounds over the lower third of the right lung. A mucous polyp half-closed the right naris; larynx normal. When the tongue was forcibly depressed I could see, a little to the right of the median line, at the lower third of the larynx, a small red fungoid mass, about the size of a pea. The vault of the pharynx was normal, and nothing else of an abnormal character could be seen. I removed the fungoid mass with a snare, and beneath it found an opening about two millimetres in diameter, into which I passed a small elastic catheter, which I gently pushed down the fistulous tract thirty centimetres, when she complained of its extremity causing her pain a little to the right of, and below the right breast.

The position of the lower end of the fistula seemed in some way to account for the enfeebled respiration at the lower third of the right lung. The patient did not wish to remain in the city, and I therefore was unable to see her when there was pus in the cavity, and consequently could not determine the exact position of the lower end of the fistula.

I recommended removal of the polypus and washing of the fistulous tract daily with carbolized water or peroxide of hydrogen through the catheter introduced to its bottom. Tonics were also suggested. The result of the examination was communicated to her physician, but I have heard nothing further of the case. I was under the impression that when the lower part of the sac was filled with pus it might be possible to detect it and make a counter opening through the pleural sac, whereby constant drainage could be established so that healing of the fistula might be effected.

Dr. F. G. Stockton said: It seems to me that this sequel of a retropharyngeal abscess is something a little out of the ordinary run. I must say that in my experience I have never met with anything that has produced any such symptoms, although I have frequently met with fistulas resulting from a retro-pharyngeal abscess. The case is interesting as showing what may occur when an abscess of this kind is not recognized in time. Abscesses are liable to burrow deeply, and in a location like this where the soft tissues overlie a hard, bony substance, an abscess with a tendency to burrow could easily go very deep and by pressing upon the nerves produce these pains; but it seems strange, unless the nerves were bare, that passing a small catheter down should produce these pains below the right breast. It looks as though some of the spinal nerves might have been laid bare by this burrowing of the pus. In a case of that kind I think what the doctor suggested was about the only thing that could be done, although I can hardly see how the opening he suggested could be made so as to

give thorough drainage without injury to some nerve or other important structure.

DR. W. E. CASSELBERRY said that the subject is one of interest for two reasons: *first*, retropharyngeal abscess is not a common disease, especially in the adult. It is oftentimes overlooked, and the responsibility rests upon the physician in all cases where there is dyspnœa, continuous or paroxysmal, to make a thorough examination of the throat both by inspection and palpation, in order to determine the diagnosis. *Secondly*, it is of interest on account of the peculiar complication in this case. I have seen the record of a similar case reported by COHEN among a number of cases of retropharyngeal abscess having some peculiarities. In this one a sinus burrowed deeply between the œsophagus and trachea and finally pointed externally low down in the neck, and pus was evacuated by incision. On account of the loose connective tissue in the region and the influence of gravity, the natural tendency is for the pus to burrow downward and other cases of the sort will doubtless be observed.

In reply to DR. STRONG as to how he would make the opening suggested, DR. INGALS said: I thought that when that sinus was filled with pus there might be a considerable collection, a pocket perhaps of a couple of inches in diameter, and if it was of that size I could find the location and when found, I believe I could get into it. I should not hesitate to plunge an aspirator needle into it, even passing it through the lung if necessary. I am reminded of a case in an infant that I saw so many years ago that I am ashamed to tell of it—I then thought the child died of convulsions, but I think now that it died of retropharyngeal abscess. I know from reading of these cases that in young children sudden stopping of the breath occurs that seems as if from closure of the glottis, but there is none of the sound that occurs with spasm of the vocal cords. Last week I had a man of perhaps 50 years of age sent to me; the word that came with him was that he had stenosis of the larynx and that something must be done. I took my laryngeal mirror to examine his larynx and found a large swelling in the pharynx which I could see by depressing the tongue. It was a retropharyngeal abscess which had existed four weeks. He swallowed with difficulty, but opening of the abscess relieved the dysphagia.

DR. A. B. STRONG read a paper on

SUBPERIOSTEAL RESECTION OF A RIB FOR EMPYEMA IN CHILDREN; RECOVERY.

(See page 3.)

DR. E. FLETCHER INGALS: Some four years ago I reported fourteen cases of empyema I had treated, and since that time I have treated a number of others. I have had no experience with the method adopted by the reader of the paper, but one of my patients unfortunately had the operation done upon him. I have not very much sympathy with the operation excepting as a last resort to allow of greater contraction of the chest. The author of the paper performed the operation skillfully and his patients recovered; I fear if I had performed it my patient would have died. But I can open the chest otherwise with safety to the patient and satisfaction to myself. I have treated several cases of empyema similar to those just reported, one in a very young child, perhaps a year and a half old, where recovery followed simple aspiration. I recall two others similar to the case reported, in which the disease had run from three to five weeks. Drainage tubes were inserted through the trocar, and the cavity washed out frequently, and in both the drainage tubes were required only between one and two weeks, and the patients were well within three weeks. I think they recovered more speedily than they would have done if the rib had been resected. Another case I have in mind had been sick longer, two or three months, when I first saw it, and it was perhaps six weeks before the child recovered. In all of these cases the expansion of the lungs and chest wall became perfect.

I think children are quite as likely to recover by this method as when ribs are resected, and I think we avoid a great danger. I feel confident that I have seen cases die from free opening in the chest cavity, and I do not think it a wise practice to open the pleural sac in this manner. However, I have seen two cases die within a few hours after simple aspiration, but I do not know whether the removal of the pus was the cause of death or not. One was a child who had been suffering from scarlatina and was so nearly dead that she did not feel the puncture of the needle, and the other was an aged man. In the case reported of the boy 17 years of age, I think drainage tubes would have acted quite as well introduced through a trocar, though not quite as large tubes could have been introduced, but I do not think such a large tube necessary. With two drainage tubes one-eighth of an inch in their inside diameter I think there is no difficulty in washing out the chest and doing it thoroughly.

One point spoken of in the paper I am glad came up, as it brings to mind something important in the operation; that is, do not operate too low. In this case the 9th rib was resected; if it had been the 6th or 7th rib there would not have occurred the trouble which was experienced afterwards. I have had the same trouble through the introduction of drainage tubes too low. One patient in whom the tube was introduced in the 7th or 8th interspace finally died of pneumonia of the opposite lung, and on examination I found the drainage tube

for two inches in its course upward bound to the chest wall by the diaphragm which had crowded upward. My rule is to make the opening within an inch and a half of the surface of the fluid when the pleural sac is about half full; if the cavity was filled I should go between the 6th and 7th ribs, or the 7th and 8th near the angle. The method that I have used in introducing drainage tubes would perhaps be of some interest. At present I use a broad flat trocar that is wide enough to allow the introduction of these tubes at once, that is two tubes with an inside diameter of one-eighth inch. First make a very small opening in the skin with a scalpel, the trocar is then plunged in the cavity, and as the stillet is withdrawn, I place my thumb over the canula to stop the flow of pus; the tubes that have been prepared beforehand, are then slipped rapidly through the canula to the required depth, and the canula is at once withdrawn. No air will have entered the chest and not more than two ounces of pus will have escaped. To make the tubes I take a piece of two feet in length, cut it half way across near the middle, fold it on itself and stitch the two sides together so that the tubes can be spread apart in the chest. In one of these tubes I make openings for about four inches, in the other one or two openings close to its extremity. The outer walls of the tubes are tied tightly so that the pus will not flow till I am ready to fasten the tubes in. I cut off two half inch sections from the same tubing and pass through each two bits of string, the ends of which are tied in loops; these are carried over the drainage tubes down to the surface of the chest, long strips of adhesive plaster are then passed through the loop and fastened to the chest when the tubes will be firmly fixed. I then carry a rolled bandage around the chest over the strips and the dressing is complete. If the patient is in good condition, I then attach to each drainage tube by means of a bit of glass tubing longer sections of tubing which have been filled with water, that can reach to the bottom of a basin of water sitting on the floor; the strings which have been fastened to the ends of the drainage tube are then cut and the pus allowed to escape, or such part of it as is deemed advisable. I recall one case in which I am satisfied if I had allowed any quantity of pus to escape at first it would have been fatal. On one or two occasions I did allow more to escape than was desirable and I had to inject water into the chest to replace it.

The after treatment that I have employed consists mainly in washing out the chest twice a day with a solution of carbolic acid 2 per cent. at 100° F. With tubes placed in this way the patient's friends can perform this office, and the physician will not be obliged to see the patient but a few times, once a week or once in two or three days, according to the intelligence of the attendants. I think, however, that in adults where the lung expands with more difficulty, one should be very careful to watch the case about the fifth or sixth week to insure final closure of the cavity. I have seen cases in which at this time I think the closing of the cavity ceased from lack of proper stimulation. It is very easy to measure the size of the cavity by filling it up with water and measuring the water as it flows out. At first the cavity will rapidly diminish in size, but after two or three weeks it closes more slowly, and after the fifth or sixth week the healing will cease in some cases. At this time I have used satisfactorily washes of solution of the sulphate of zinc or copper; I like best the sulphate of zinc. In two cases of adults where I could not watch them closely at this time, I have had some difficulty later on in closing the cavity. I stated in the beginning that I had personal experience in only one case in which resection of the rib had been done. The patient had been sick about two years when I first saw him. I introduced the two drainage tubes as described and the cavity closed until it would hold only about an ounce; but there seemed no way to get this cavity to heal, however; the gentleman was satisfied and went about his business, until finally he fell and broke his arm and went to the hospital. While there it was concluded to resect one of the ribs so as to allow the cavity to close entirely. In resecting the rib a artery was cut and the surgeon had great difficulty in stopping the hæmorrhage. The resection did no good though larger drainage tubes were introduced; they did not cleanse the cavity better than the smaller ones, and the man still wears them. From my experience I believe that where two tubes are introduced as I have directed, and washing is carried out through first one and then the other, there is no difficulty in cleaning the cavity perfectly, unless gangrene has occurred. Flakes of lymph will be readily washed out, or if too large they will be disinfected so as to remain harmless until they finally break down or become organized with the new tissue that binds the two pleural surfaces firmly together.

MR. JOHN D. SKEER: I have not had much experience in exsection of the ribs for drainage purposes, but as far as the operation is concerned it is certainly not a very formidable one when performed as DR. STRONG has described it, by making the operation subperiosteal. I have had a great deal of trouble, in my practice, in the drainage of chest cavities with small drainage-tubes. I recall a number of cases in the army, and I think now that if I had those cases under my care I would exsect a portion of the rib. The rapid flow of matter under these circumstances does not necessarily follow. The opening into the cavity may be

small or large, according to the size of the drainage-tubes, and the flow of matter can be moderated according to the requirements of each individual case. The importance of this grows out of the fact that the lung becomes bound down by bands and adhesions which prevent its rapid expansion, and there may possibly be ulcerated spots admitting air into the pleural cavity, and pus into the lung tissues, from a too ready expansion of the lung, and it takes time for these bands and adhesions to soften down, relax and expand to accommodate the lung in its natural expansion. We should differentiate between serous effusion into the pleural cavity and suppurative inflammation of the pleura.

DR. H. T. PATRICK: My experience with this operation of resection is limited to one case, which I had under observation three years ago. It was not a case of simple empyema, but a pneumo-pyothorax of a boy ten years of age, or over a year's standing, with considerable retraction of the chest, and a small external opening. Three ribs were resected, the 6th, 7th and 8th. The ribs were remarked overlapping one another, and for that reason more were removed. The boy made a very satisfactory and rapid recovery; he had considerable temperature and was much emaciated, but immediately after the operation, the chest being washed out once a day, he lost his temperature and at once began to flesh up, and in a few weeks was entirely well. In regard to the operation, my idea is that it should be limited to this class of cases. I should say that in empyema aspiration, incision and drainage, and resection of the rib, should be the order of procedure. In DR. STRONG'S second case the lung failing to expand well points out one of the weak points of the operation as a primary procedure. Had aspiration been performed first I think the condition would have been more favorable for expansion than by making as free an opening as for resection and allowing air to enter the cavity. I think we follow right in the line of Nature's efforts in these cases of retraction of the chest wall; we allow the chest to fall in and approximate itself to the other surface. There are other dangers connected with this operation as a primary procedure; one is that there are cases on record where, under anæsthetic, the cavity has ruptured into a bronchus, and the patient has choked to death. Deaths have also been recorded from simply washing out the cavity.

DR. N. H. PIERCE: There is one thing that I would like to suggest in this connection, and it is this: As I understand it, we resect a rib to simply enlarge our area of drainage. In a case that I had in the last month where I had drawn off nearly three gallons of fluid in three *tempos*, I first merely inserted a drainage-tube one-half inch in diameter; this drain was constantly being plugged up by coagula, or whatever it might have been, thus causing retention and absorption of the purulent matter, followed by the usual symptoms. I resected a rib after that and introduced a drainage-tube one inch in diameter, with the advantage of not having it clogged up again; the patient is making a good recovery. Another point is, that there have been a number of cases reported from the Berlin clinic, of death from drowning occurring from washing out the cavity while the patient was under ether, there being a communication between the pleural cavity and the lungs. It is well, therefore, that the primary cleansing be delayed until the day following the operation. I have, in three cases of this character, let out the entire contents of the cavity, amounting in each case to three or four pints, with no abnormal result. Using as an antiseptic lavage a saturated solution of boracic acid. There have been deaths reported from the use in the pleural cavity of carbolic acid, thymol and salicylic acid, and the only agent that has not been proven more or less dangerous when used in the pleural cavity is boracic acid, and DR. FRAENKLE insists that this is the only thing that should be used in this capacity.

DR. A. B. STRONG was very glad to find that his article had excited so much interest. It is certainly a practical subject, and one we are likely to meet with any day, and I am yet in favor of resection. It is my impression that the first resection was made about fifteen years ago. A point against resection was raised by DR. INGALS—that of the too rapid evacuation of the matter. That point was ably answered by DR. SKEER, who said that when we have free evacuation we have a corresponding influx of air which takes the place of pus. I believe that to be so. In the two cases reported there was considerable cough at the time the chest was opened, but that quickly subsided. I had no fear that there would be rupture of the lung; I could feel the pleura three-fourths of an inch thick. Until some better reasons are given for not operating, I shall certainly be in favor of making a free opening by resection. I want to make an opening large enough so that I can get into the cavity and evacuate it freely; I cannot get out enough pus through an eighth of an inch opening to satisfy me. In the case of the older boy, shreds of lymph as large as the little finger were thrown out for several days. I have no fear in opening the chest freely and draining it freely.

DR. MACKENZIE is reported to have received a thousand pounds ($5,000) for each visit made to the Crown Prince of Germany—a fee in very decided contrast with that which an ungrateful republic allows for the care of its chief.

ANTISEPTIC MIDWIFERY:

BY E. B. WARD, M. D., LAINGSBURG, MICH.

It is astonishing how much segregated acquirement and diaphanous ability a country doctor can wander through the world with, and have tolerable success too.

I was just now reminded of this fact by reading a little monograph on "Antiseptic Midwifery" by a learned professor in an eastern school. It flattens a man out like a blow from a pile-driver, to find, as I have, after upwards of thirty years in active village and country practice, with more than the average of obstetrical cases falling into my hands, that I have been wrong, and not only wrong but almost criminally wrong, because where there was an opportunity to do so much, I have done so little. "Still one sweetly solemn thought steals o'er me now" that in all these years I have never lost but two patients whose deaths could by any possibility be connected with confinement. These were both in the last stage of consumption and both primipara. One died of eclampsia and the other of collapse. Not a single case of septicæmia.

Still I know now, in the light of true antiseptic midwifery, that all these long years I have been a blind leader of the blind, and if my patients didn't die they ought to have done so, and thus kept pace with scientific research.

But hear what the professor says after enumerating several objections raised to his method by various classes of doctors: "Finally I would like to impress the importance of antiseptic midwifery on country practitioners; the most numerous class of physicians.

Absence of sewers necessitates the accumulation of feces and urine in privies. The fields in the immediate neighborhood are often spread with these substances as manure. All sorts of refuse are thrown on the dunghill where it undergoes putrefaction and sends malarious effluvia to considerable distances." All this is true, and he might have added that the husband and his hired man come into the house smelling worse if anything than the fields and flowers, and they ought to be disinfected each time before entering.

But listen, "Still greater is the danger from the physician himself"—I have thought of that a thousand times myself in connection with all diseases—"he cannot go home to change his dress and take a disinfectant bath. When once out on his long journey he must see patients in the order of their residences, and thus he may be compelled to go directly from a case of erysipelas or diphtheria to a confinement"—I have done so repeatedly and it makes me feel like a murderer now—"Nay," he says, "a country doctor may even hold an autopsy and thereafter go to a confinement where he must introduce hand and forearm into the uterus in order to perform version." That means me again. Oh, that my arm had been sawed off ere I had perpetrated such a series of diabolical outrages.

"The country doctor," he continues, "ought therefore, no less than his city *confrère*, to give his parturient and lying-in patients all the benefits of antiseptic midwifery."

The professor hardly makes the way of escape clear in such cases, but he intimates afterwards that a man should carry enough of the bichloride with him to make all needed solutions. Taking a disinfectant bath in a log-house with barely one room, filled with old midwives and children, might embarrass a bashful man, but I am satisfied now that it ought to be done, and he might conclude by disinfecting the whole family, whose offense tho' slight, still smells to heaven.

The learned professor then goes on to explain his method in private practice: "First of all," he says, "I disinfect my own hands and have the nurse do the same (solution of the bichloride I suppose) and let her, under my supervision, wash all the parts liable to be touched during delivery, with the solution of the bichloride of mercury. The vaginal injection I prefer to give myself. During labor and delivery I constantly have a basin or bowl with clean solution (1:2,000) standing at the bedside, and never touch the patient without holding my hand immediately before for at least a minute in the fluid."

Now there is where I have been criminally negligent, for I have repeatedly "got there" just in time to "catch on," and if I had waited half a minute to hold my hand anywhere except in the vicinity of the patient's perinæum, I should have lost my fee and the confidence of the friends; but still I shall do so hereafter, come what will.

The professor further advises, in cases of protracted labor, that the vaginal douches be "repeated every three hours." I do not wish to try to improve on his plan, but it seems to me that an injection of the bi chloride (1:4000) into the bladder in addition to the enema and vaginal injection might be advisable, and further, I would have the patient disinfect her hands because there is no telling what she may do in the throes of labor. If antiseptic midwifery is a good thing, and I think it is, we can't have too much of it.

The professor endorses CREDÉ'S method of the removal by expression of the placenta, only in this that "I do not share the originator's views as to the desirableness of having the placenta removed within a few minutes after the birth of the child." He then proceeds to tell his method: "The accoucheur stands on the right side of the bed, inserts his eight fingers as far down as they will go on the posterior surface of the uterus,

at the same time pushing that organ with a moderate degree of force in the direction of the hollow of the sacrum and when he feels the womb contract he tries, as it were, to squeeze the placenta out of that organ."

Now, that transfixes all my practice in this respect, and makes me feel like an unpardoned horse-thief. My plan has always been to sit down by the bedside as soon as I could dispose of the child, and while one hand held the cord taut—nothing more—the other was placed over the abdomen and marked the contractions of the uterus, gently stimulating them by careful kneading of the organ with my finger ends. I always thought that pushing down on an unemptied uterus was like pushing up on a strangulated hernia without some assistance at the outlet.

In my poor weak way I had supposed that to secure a contraction of the uterus was the only proper way to deliver a normal placenta. But this is a slight digression which the professor indulged in, and now he goes on to particularize. He says: "The accoucheur must bear in mind that of all the dangers surrounding his patient the greatest lurks in the creases and furrows of his own hands." I know that to be a fact, so far as the hands are concerned, regardless of the creases and furrows, and I further know that country doctors are a dirty set of men, who frequently look muddy and smell horsey. The professor suggests that they carry a "stiff nail-brush" in their satchels, and cleanse the hands with soap and water and then repeat the scrubbing with a solution of 1:2000 of bichloride, and afterwards clean the nails with a knife.

In this matter of course I grope somewhat, but still I feel that I am on the right road, and hereafter when called to a case of confinement I shall disinfect everything. A mangy dog may bring in bacteria from some neighbor's carion, and he should be immediately dipped in a solution of the bichloride 1:1000 and held under for two minutes at least. With a barrel of a solution of that kind out in the "rain trough" a man could disinfect everything that would submit to it on a poor man's premises, in short order.

Another thing that the professor failed to elucidate to my entire satisfaction was in regard to "the baby." Now it seems to me since the learned HENRY O. MARCY* has said that "the vagina is never free from actively growing organisms," that the child should be immediately immersed in a solution of the bichloride 1:4000, and afterwards carefully washed with a solution of the same kind, thereby preventing the necessity of any further antiseptic treatment of the cord or of ophthalmia neonatorum.

*Journal of the American Medical Association, December 24th, 1887.

The professor, however, seems to lose his footing on the antiseptic treatment of ophthalmia neonatorum, and he recommends that "as soon as possible after the cord has been cut the outer surface of the eyelids be washed with plain water; next they are slightly separated"—this is the preventive treatment understand—and a single drop of a 2-per-cent. solution of nitrate of silver is instilled by means of a glass "squirt" on the cornea. Here again I have been away off. I never had any trouble before with the disease, and my only direction was to use cleanliness and "squirt" a little breast-milk on the cornea.

In conclusion, I can only say that the information coming from the professor, though late, comes like a benison. Now I have got something tangible, something that I can tie to and feel that the patient is safe, whether I visit her or not. Until this I have been timid sometimes and thought that my patient might die in a weary way, without proper treatment, but now the way is plain; now the question is resolved into primitiveness, and simplicity itself, and the wayfaring doctor, though a driveling and miraculous idiot, can not err therein.

Finally, I sincerely hope that HENRY O. MARCY, A. M., M. D., LL. D., will not promulgate his idea relative to the "actively growing organisms" from which "the vagina is never free," so that the laity can get hold of it. MARCY, don't do it! Give us a diatribe on most anything else. If they are there now, they always were, and though like GALILEO, you may have discovered a pivotal point in practice round which the world revolves, don't let our marrying men find it out, or it might lessen legitimate reproduction, unless antiseptic copulation comes in vogue.

Correspondence.

REGULATION OF MEDICINE BY LAW.

I wish to correct some wrong impressions that seem to have lodged in the understanding of the author of an article in your issue of Dec. 10th, page 537. I will not deal in accusations or recriminations. I am not proud enough of seeing my name in print to approve of its repetition nine times in the criticism of a short article of mine. I presume that is true of many of your readers too. I owe the gentleman thanks for giving my article a prominence that I never expected it to attain when it was written, by his caustic review of it, thinly disguised by courtesy as it is. It may be that all true physicians will understand and denounce my article as the plea of a quack for quackery, but as I do not believe that he has authority to speak for all of that class I shall not believe

it on his unsupported statement. He first takes issue with me regarding a fact. In my paper of Nov. 10th, I only referred to the protest of the representative M. D.'s of this State, which is an undeniable fact, but by the hasty and faulty construction of the sentence it inferred a farther analogy than in the defeat of the law in both states which I did not intend. I certainly know of quite a number of representative men of your state, however, who were opposed to its passage besides the Homœopaths, as admitted by him. It does not seem to have dawned upon his mind that a man can oppose the methods proposed to inaugurate a reform while he is in sympathy with true reform itself, which I claim is my position on this subject. I have now for the first time to learn that the words "strongly suspect," are a bold, unqualified affirmation, and necessarily imply an unlimited amount of cheek and that the one who uses them is lacking in wisdom for that reason, as he asserts if I understand him correctly.

I wish to call the attention of your readers to the conspicuous absence of the sentence containing an important admission which follows and is a prime part of the questions which he quotes at the bottom of page 538 (1st column). The first and last of those questions he makes no attempt to answer. I wish he had chosen to try to do so. "It does not look well in any man" it appears to me to indulge in such sweeping wholesale condemnation of medical colleges and their professors, neither does it lessen the offense in my opinion that so many others indulge in like railings against their alma maters or those of others.

"Hundreds of those who step down from our institutions every year with their degrees, possess no stock in trade except their cheek, and the roll of parchment for which they have paid their money," etc., on page 170, MEDICAL AGE, of April 25th, 1887, by this same gentleman, is what I term a "bold unqualified statement." I deplore the existence of such unfilial utterances, and, however true of Michigan and his college mother, they are utterly unwarrantable and untrue of my "*fostering mother*," to which I am proud to owe a filial regard, and I should expect that she ought to disown me for such words, if I used them.

I have often heard something of the kind from those who were "plucked," each of the several years that I was acquainted with her classes, who could not be made to believe that they did not know as much as any other one in the class or even more, and quite as much or more than the professors themselves.

One thing is noticeable in his article, viz., ridicule and abuse are indulged in, but no attempt is made to answer some of the questions asked. They were asked in good faith with the hope of gaining some information from men of such deep erudition as himself, but they are simply characterized as "deplorable stuff," followed by an implication regarding the use of M. D. after my name, which use I can inform him is sanctioned by the Illinois State Board of Health, which he praises in his article of April 25th. I beg leave to submit to your readers that he succeeds in condemning himself in impugning the motives of others in his careless statements respecting "my condemnation" of either "men or method" or the "agitation of regulation," neither of which I have done. It would appear that even yourself, Mr. Editor, must come under his condemnation for daring to oppose a law which he so zealously favors, allowing his zeal (apparently) to prevent his using the courtesy usually considered due to an opponent. I will answer his question regarding teachers by reminding him that a very short practical experience entitles a graduate of State or other classical universities to a State teacher's certificate, which he can claim if of good moral character, and is not then amenable to any other authority in this direction. Graduates from the Law Department of universities also find their diploma a sufficient passport to the favor of the public. In regard to the quacks that are found in Michigan, not possessing the acquaintance of any of them, or having reason to know or believe before reading his article that there was any undue proportion of them in that state, I will answer his question yankee fashion by asking him why their number is still very considerable in the States which have such a law as he contends for, as I know is the case in Illinois.

I note the fear expressed on page 171, April 25th, 1887, in the article before referred to by the same author while living at Kalkaska, regarding the danger of "farmers, mechanics and even their wives," leading us in general intelligence, etc., and ask all to compare it with his present estimate of the intelligence of the State of Michigan. Is it owing to this change of location to Cedar Springs? I am 36 years of age, came here from Chicago, and have not found it necessary to change my location to earn a living since then or during 1887, now so nearly closed. I am in favor of a rational, consistent, radical law which shall do equal justice to all concerned, and which shall tend to the upbuilding of our noble profession and secure to us all of our rights, but I am not in favor of any monopolistic, half-way measures even if their existence and enforcement lessened the competition for the dollars and cents to be made by practicing medicine in my locality. I want no unwilling or enforced patients who prefer some other doctor to attend them.

J. V. STEVENS, M. D.

PRAIRIE DU SAC., WIS.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH. JAN. 10, 1887.

Editorial.

THE TREATMENT OF DIPHTHERIA.

The question of the treatment of diphtheria is one of perennial interest, and until some method has been discovered which will give the practitioner some degree of confidence in the presence of a case of this deadly disease, everything by way of suggestion in the direction of its therapeutics, especially if it have anything of novelty associated with it, will be received with avidity. It is the experience of most physicians when they may have begun to place reliance on some particular line of treatment, that they have met with a run of cases whose outcome has so seriously shaken their faith in all drugs as agents of cure in this disease, as to make them very pessimistic. Few, however, will admit the incurability of the affection, or deny the probability of the discovery, in the near future, too, of some effective means both of prophylaxis and therapeutics. This discovery can come only through the patient, persistent and intelligent clinical trial of every agent whose physiological action is antagonistic to what we conceive to be the pathological condition which obtains. The greatest obstacle to success in this direction lies, unquestionably, in our ignorance of the specific condition which we are called upon to combat. That we are making some progress, however, is evident from a comparison of the later with the earlier statistics.

The latest valuable contribution to the therapeutics of diphtheria is an article from the pen of DR. SIMON BARUCH, in the Medical Record, of the 24th ult. DR. BARUCH is attending physician to the New York Juvenile Asylum and Manhattan Hospital, and in this capacity has had unusual facilities for the tests on which his conclusions are based. We have been, personally, especially interested in DR. BARUCH'S article because of the support which it lends to certain deductions drawn from the collective investigation of diphtheria which we conducted, in 1883, which deductions were received with some incredulity in certain quarters. Among these deductions were the following: 1, diphtheria may, and probably most frequently does, exist as a purely local affection; 2. it may be first local and then constitutional; and, 3, the local affection may be secondary to grave constitutional infection. DR. BARUCH recognizes that "the local deposit of diphtheria may be either the precursor, or the sign-manual of systemic infection." Another deduction which was ridiculed was that a large share of the benefit derived from the exhibition of the tincture of the chloride of iron is due to its local contact with the affected parts during the process of deglutition. DR. BARUCH declares (with italics to emphasize the statement) that "disinfection of the throat is best accomplished by the frequent internal administration of tonic, astringent and antiparasitic remedies; not by brush, probang or atomizer." So much importance does he attach to this local action of medicines swallowed that he insists that neither water nor food should be permitted for ten minutes after taking the medicine. This method of treating the local affection will especially commend itself in the case of patients who cannot be brought under absolute control. To insist on making local applications in the case of struggling children savors too much of barbarism for an advanced therapeutics.

DR. BARUCH attaches much importance to the local action of trypsin, especially in cases in which the nasal passages have been invaded. He employs a 15-per-cent. solution, which he applies by means of a soft brush or the medicine-dropper. It softens and pulpifies the false membrane and facilitates its removal by injections of salt water or a 1:10000 solution of mercury bichloride, which latter he applies at frequent intervals in nasal diphtheria. While it is his practice to abstain from local applications in most cases of the faucial variety he applies it vigorously, by means of the brush and soft rubber-tipped syringe in all cases of nasal diphtheria. When the air passages are also involved he also resorts to inhalations of the vapor from boiling lime-water impregnated with oil of turpentine—one ounce of the latter to one quart of the former—used continually. He deems it of importance in giving these inhalations that the patient, particularly when suffering from laryngeal stenosis, should have a liberal supply of fresh air, and condemns as dangerous and unscientific the tent with which it is customary with some to cover the patient during the administration of inhalations in diphtheria. Cold air currents should, however, be strictly guarded against. In cases of glandular swelling applications of ice should be made.

In discussing the question of internal medication the writer passes in review the most common remedies for the disease, and declares very positively in favor of the tincture of the

chloride of iron and the bichloride of mercury. In every case, not presenting diarrhœal symptoms, he commences treatment with a free dose of calomel (4 to 8 grains, according to age of the patient), followed in the course of six hours by a saline laxative. A remedy which he, however, brings into special prominence is the oil of turpentine. This is by no means a new remedy for diphtheria, but DR. BARUCH'S method of exhibiting it is not generally familiar. He gives it in what is regarded as large doses—a teaspoonful to a tablespoonful once or twice a day. This use of the drug was first suggested several years ago, and though originating in this country has met with much more favor abroad, notably in Germany. The objection to its use has been a fear of the characteristic effect of the drug on the genito-urinary tract. Singularly, however, the large doses given as recommended are not as liable to produce this effect as the ordinary medicinal dose—ten to fifteen drops—frequently repeated. There is strong scientific warrant for the use of turpentine in diphtheria. The drug ranks high as a carrier of ozone, which is a powerful parasiticide. So dilute a solution as 1:75000 arrests the development of the anthrax spore.

The drug is eliminated by nearly all the secretions, thus proving very clearly that it circulates in the blood, where it must come in contact with such germs of disease as circulate there. The blood, moreover, will carry without danger to the life of the patient a much larger proportion of turpentine than of any other known germicide. We have in it, therefore, a near approach to that desideratum in the treatment of diseases due to the presence of a materies morbi in the blood—an agent which acts to kill the germ without material detriment to the patient. Estimating the quantity of blood in the body of a child twelve years of age, at ten pounds, a dose of half an ounce of turpentine will produce a solution of 1:320, and this strength can be borne with impunity. DR. BARUCH finds one large dose—ʒ to ʒ ss, according to age of child and severity of disease—daily, sufficient, although the urgency of the case may sometimes demand a repetition of the dose during the twenty-four hours. This exhibition of the drug does not preclude the use of the other remedies—iron and the bichloride—which are indicated in all cases of any degree of severity.

The chief points emphasized in DR. BARUCH'S admirable paper are the following:

1st. The necessity for local applications in the nasal and laryngeal form, and the inutility of these in most cases of the faucial variety.

2d. The administration of large doses of tincture of iron to saturate the system, instead of the small doses formerly resorted to.

3d. The value of full doses of bichloride of mercury in the more severe types, especially in the laryngeal.

4th. The value of large doses of oil of turpentine once a day in all severe types.

5th. The inutility of chlorate of potassium.

6th. The advantage of administering our remedies in such form and rotation as to obtain their local antiseptic effect in connection with their general effect.

THE USE OF ALCOHOL IN FEVER.

Doubtless, the article by DR. DICKEY, in our present issue voices the sentiments of some of our readers on the subject of the use of alcohol in fever, and the position which he takes is by no means unsupported by plausible argument. It is, however, we are constrained to say, too late in the day to visit on this drug, in spite of the abuses to which it has been subjected, the unqualified condemnation which is the gist of of DR. DICKEY'S paper. Arguments based on the physiological action of the drug are well enough in their way, but the only true criterion of its therapeutic value must be furnished by observations taken at the bedside, and the consensus of medical opinion endorses the exhibition of alcohol in typhoid fever. During the past month the Medical News has devoted a considerable portion of its space to the modes of treatment of this affection pursued at twelve of the chief hospitals of this country. Without exception alcohol is employed at these institutions, no substitute for it in the progressive asthenia of the disease, having yet been discovered. Testimony of this nature must continue to outweigh arguments such as those which DR. DICKEY has adduced.

We think, too, that even the physiological action of alcohol, when more closely looked into, will furnish arguments calculated to negative those which DR. DICKEY deduces from the same source. In typhoid fever digestion and absorption are almost suspended, but the consumption of the adipose and the glycogen of the system goes on *pari passu* with the elevation of temperature. While a gallon of milk might have the inherent property of repairing more tissue waste than a gallon of whisky, it requires digestion and absorption before it can be utilized to this end, and with the suspension of these functions its ingestion does harm rather than good. Alcohol requires no preparation for its absorption. It is a form of hydrocarbon capable of prompt oxidation, and thus by supplying fuel for combustion prevents the consumption of the animal tissues. In fever, too, there is great loss of water from the system. The oxidation of alcohol necessarily involves the formation of water, and thus supplies a very essential want. It is not necessary

to discuss the stimulating properties of the drug to determine its efficacy in fevers.

SHALL A PHYSICIAN DELIVER HIS CRIMINAL PATIENT TO THE AUTHORITIES?

This question which, we believe, has never been passed upon by the supreme court of the profession, *i. e.* the American Medical Association, has again presented to the profession of this city through the efforts of the police to discover a burglar who was shot recently by one of their number, while engaged in a piece of "business." That the criminal was severely wounded, there is abundant evidence to prove, and that he is under medical care there is no reasonable room for doubt. The physicians of the city have been very generally interviewed by detectives, and their duty in the premises urgently presented. As yet, however, the victim of the shooting has not been placed in charge of the authorities Is the attending physician justified, under a proper conception of his calling, in keeping his patient out of the clutches of the law? This question, as we have intimated, is not a new one and it has received different answers. We believe the statutory provision that a physician may not be compelled to reveal a professional secret, is sufficient in the way of legal protection. But is he warranted from a moral stand-point, in standing between his criminal patient and justice? This question each man will answer as his own conscience shall dictate. As we view it, it is not the physician's duty to play the part of the detective, or to take advantage of his peculiar facilities to expose crime. He may not, of course, as a citizen, aid the criminal by his silence. and it is his duty to assist the authorities with all knowledge which may come to him through the channels, through which the citizen, as such, may receive information. As a citizen, however, he does not become informed of the criminal's whereabouts, and while his instinct of justice would prompt him to put the authorities in possession of his information, the higher instincts of mercy and fair-play and compassion for his unfortunate patient, coupled with his sense of professional obligation, should be sufficient to keep the seal of secrecy inviolate.

BORO-GLYCERIDE FOR PESSARIES.

Several months ago DR. WYLIE, in a paper read before the Northwestern Medical and Surgical Society of New York, called attention to the use of boro glyceride as a substitute for other materials in use for uterine pessaries. The formula which he recommended, as a result of his experience, was an ounce of boro-glyceride and enough pure glycerin to make a pint. When an astringent action is desired he adds to this an ounce of sulphate of alum. When no astringent is wanted acetate of aluminum, in the same quantity, is added. The objection to the employment of glycerin alone lies in the fact it is liable to undergo fermentation in less than forty-eight hours. The boro-glyceride combination while doing all that is claimed for glycerin, in the way of depleting the uterus, etc., has a more beneficial direct local action, and can be retained with impunity for seventy-two hours and upwards. We can testify from personal experience in the use of DR. WYLIE'S formula that it is a very decided improvement on glycerin. It is applied on the cylindrical cotton tampon, the shape of which keeps for at least four days, when it may be removed by the attached string. The boro-glyceride is a valuable contribution to uterine therapeutics.

Notes.

The clean, granite-paved streets, the excellent drainage and the abundance of pure water, which have of late been introduced into St. Louis, have begun to have their effect in the diminished amount of sickness. There is much complaint among the druggists, many of whom say that unless there be a change soon their occupation will be gone. The doctors do not complain. They rejoice to see the excellent results from the improved sanitary condition of the city. It is only tradesmen, like druggists, who can be so sordid as to deplore the decrease of sickness for pecuniary reasons. The St. Louis Medical and Surgical Journal, however, denies the allegation which was recently made by some of its contemporaries that the prevailing dullness has induced some practitioners to reduce their fees to twenty-five cents a visit, in order to attract business. We are glad to learn that things have not yet come to that pass.

It is a more or less encouraging sign of the times to find female physicians (or "hen medics," as they are irreverently called by a degenerate laity) giving free public expression to their views on important questions connected with their calling. At a recent sanitary convention held at Owosso, Mich., it is reported that a male critic of the modern female attire was quite staggered by the "counter" of a representative of the persecuted sex. "Women dress as men want them to," she said with much vigor. "You cause such a revolution in mankind that men will prefer to hug fat waists, and I will agree to send tight lacing into the shades so quick it'll make your head swim. So there, now."

The early struggles of MARION SIMS deserve to be remembered. No man ever did so much original work untrammeled by academic duties, yet he made a bad start in life through defective academic instruction. "Our indiscretions often serve us well when when our best plots do pall," and the failure of SIMS to cure babies with infantile diarrhœa made him throw his door-plate down a well in disgust; then he went to a medical school again for a year; thence he fled once more to the wilderness and practiced in a little town in Alabama. He had learned to observe and this learning did him yeoman's service. In a very short time he had reformed plastic surgery and discovered the singular phenomena associated with the genupectoral position.

"The Medical Waif" is the name of a new venture on the treacherous billows of journalism. True to its name the little sheet does not plunge boldly into the swim, but timidly disports itself in the shallows. It, in other words, proposes to confine itself to diseases of "children, women, rectum and anus." The selection of subjects is a somewhat peculiar combination. Of course as it is understood that the diseases of women and children comprise anything which may ail her or it, it follows that the Waif will not entirely ignore the male adult, even though it timidly reaches only to his rectum. We hope it may be kindly cared for, and that with increase of age it may develope higher aspirations.

The increase of rabbits in Australia has, in spite of measures heretofore tried for its reduction, become such as to threaten the extinction of farming industry. The government has offered a prize of $125,000 for an effective method of destroying the pest. PASTEUR is a candidate for this prize, and his method consists in the introduction of the virus of chicken cholera. Rabbits, he claims, are very susceptible to this poison, and he assumes that the establishment of the disease in one of their colonies would soon be followed by universal infection through the medium of the droppings. The outcome of the experiment will be awaited with interest.

The proud distinction of publishing more medical journals than any other city in the United States, is claimed for Louisville, Ky. We dispute the claim, on behalf of Detroit. In point of numbers of journals issued Detroit equals her, and we have two journals (one of which is the AGE) the *bona fide* circulation of either of which excels the combined circulation of the Louisville journals. Modesty prevents a reference to the respective merits of the publications, but the verdict of the profession may be read in the comparative sizes of the subscription lists. Louisville is a right smart town but when it comes to boasting of her medical journals ———.

The Medical Standard is an anonymous journal published at Chicago, in the State of Illinois. It doesn't announce its editors' names, for the alleged reason that it wants "to stand or fall on its intrinsic merits." It regards it as "a species of cheap tradesmen's advertising, inconsistent with the dignity and individuality of the journal" for medical editors "to stick their journal labels over the columns of their publications." This is one way to look at it, but when the carping fault-finder, whose mission seems to be to tear down rather than to build up, protects himself behind the "anonymous," he finds it difficult to gain credit for independence. People are in the habit of characterising such action by another name.

It is prejudicial to the physician's financial as well as professional success to make light of slight ailments. The slightest of these may be the incipiency of something very grave, and besides, when a patient consults a doctor he is entitled to the most careful and thorough attention. The physician, moreover, who makes light of his patient's ails soon loses his confidence, and with that goes the "pot-boiler." It is not necessary to alarm your patient with grave looks and ominous words, but convince him by your scrutiny of his case that you take an interest in him. It pays to do this.

DR. GOODELL, of Philadelphia, having stated that he had never known a woman to conceive who had once had gonorrhœa, the statement has called forth a difference of opinion. A writer in the Medical Brief cites two cases, one a girl of eighteen who contracted a "blooming case." Married a preacher at twenty; settled in Virginia, and had eight children. The other a widow who fell from grace in a St. Louis sleeping car; beautiful case; married second time and had twins eleven months afterwards. What facts, if any, have readers of the AGE bearing on this interesting question?

GOVERNOR TAYLOR, of Tennessee, tells a story of a colored clergyman who took for his text: "And multitudes came to Him and He healed them of divers diseases." Said he: "My dying congregation, this is a terrible text. Disease is in the world. Small-pox slays its hundreds, the cholera its thousands and yellow fever its tens of thousands, but, in the language of the text, if you take divers disease you are gone. These earthly doctors can cure the small pox, cholera, and yellow fever, if they get there in time, but nobody but the good Lord can cure the divers."

Dr. Luigi Doane, of New York, takes the ground that the public gets just as good medical care as it is willing to pay for. No other

calling among men is so much abused by the dead-beat. He thinks that before raising the cry for a higher education, the efforts of those who bemoan the low status of the average medical man, in respect to the qualifications of his profession, should be directed towards such an elevation of the moral tone in the public as would lead it to distinguish properly between *meum et tuum*.

The news from France is that while the population is on the increase the number of physicians is on the decrease. For the past four years there has been a steadily diminishing number of diplomas issued by the medical schools. The inconvenience of this lack of medical assistance is said to be chiefly felt in the country districts. Whether the decrease of doctors and the increase of population bear any of the relations of cause and effect has not yet been determined.

The question of burning their garbage is now agitating a number of cities. Furnaces have been put in operation in several. As a means of destroying the material, cremation will, doubtless, prove effective, but whether it is wise to thus dispose of it is a serious economic question. A proper system of disposing of it must be one which involves its return to the soil whence it came. Nature rebels against all attempts to deprive her of her legitimate deserts.

A clergyman meeting a physician, a member of his congregation, sought to indulge in a little raillery at his expense. "Why, doctor," he said, "you look pale, I thought you might be able to keep yourself well." "True," replied the doctor, "my health, I fear, is commencing to fail me." "Is it your stomach, your heart, or your kidneys?" "No, they are all in good condition, but lately, do you know, I have been able to stay awake during your sermons."

Dr. Van Harlingen, the Philadelphia dermatologist, does not believe in the contagiousness of leprosy, and, therefore, did not isolate two cases of the disease which came under his care. His opinion of the nature of the affection cost him just $100—which was the amount of his fine assessed against him by a minion of the law. The opinion which entails a sacrifice of this kind may be valuable, but it pays to keep it to one's self.

The following method of resuscitating the new-born is said to be successfully employed among the aborigines of this country. Dr. Weisner, of Chicago, has introduced it to the profession: Place the infant on a warm blanket, as far from the mother as the umbilical cord will permit. Then instruct the mother to take a few deep inspirations, with each of which, it is claimed, the child will open its mouth, gasp and even begin to breathe.

Dr. Newton Hill, of Pickensville, Alabama, reports to the Medical and Surgical Reporter his attendance, during her confinement, on a negro girl, eighteen years of age, who gave birth to twins. Of these one was "as black as the ace of spades" and the other was white. There was but one placenta, both cords being attached to it. The girl gave a history of association with both black and white lovers.

Dr. Y., of Louisville, is known for the quickness of his wit. A little boy fell in convulsions on the street one day and the doctor was hastily summoned. "Has he kicked the bucket, doctor?" asked one of the crowd. "No," returned the doctor, "he has only turned a little pale."

A French army surgeon has suggested the wisdom of tatooing on each soldiers body the course of the arteries. In the event of his being wounded it would not require the service of a surgeon for such assistance in many cases as might be necessary to save life.

Raw oysters are now said to be diuretic. The succulent bivalve has long been held to be a good digestive agent, but the shrewdness of the dealer in attaching to it diuretic properties, is admirable. The demand for gin will now experience a great falling off.

In his youth Buddha won races and studied learned books. In his youth Ephraim Mc Dowell beat a champion foot-racer, and conned books of travel and treatises on chemistry. He was thirty-eight years of age when he performed his first ovariotomy.

We are pleased to record the convalescence of Dr. Thomas F. Wood, of the North Carolina Medical Journal, who has been under treatment for aneurism during the past year. The treatment consisted in absolute rest in bed.

The St. Louis Medical and Surgical Journal reports an epidemic of crab lice (*pediculi pubis*) in that city. The agency of Chicago in introducing this plague among the Egyptians has not yet been clearly traced.

Cayol, in his criticism of the system of Louis, declared systems in medicine to be idols to which human victims are sacrificed.

The Homœopaths of New York, it is said, are prescribing antipyrine in 15 grain doses.

Medical Progress.

GERANIUM MACULATUM.—If the craze for therapeutical novelties could be diverted from the jungles of India and the laboratories of the manufacturing chemists, to the fields and forests of the United States, suffering humanity would be the gainer. Many of the most highly-lauded, marvelous synthetical products and wonderful drugs precipitated upon the profession during the past few years, are not only useless but positively injurious, while scarcely 2 per cent. of the remainder possess any practical value.

Geranium maculatum, to which I desire to redirect your attention to-day, is not a new remedy imported over thousands of miles of land and sea, at prodigious expense, neither is it the patented compound of forty stills, recommended as a sure cure for all diseases by forty medical theorists, who do not know the difference between the pulse in health and disease, but it is one of the most valuable and yet the least known of American indigenous remedies. More than sixty years ago DR. BARTON, in briefly reviewing its medicinal properties, declared it to be certainly entitled to the attention of every American physician. Yet, notwithstanding the communication of DR. BARTON, and other distinguished observers, geranium maculatum has been almost entirely discarded. Indeed, so seldom is it prescribed, that druggists in many places do not keep it in stock. When I began to investigate its merits, five years ago, not one of the eight druggists to whom I sent for it had any on hand; and I was finally compelled to send to a wholesale house for the quantity needed.

Geranium maculatum contains tannic and gallic acids, gum, starch, sugar, coloring matter, and various resins and oleo-resins which have not yet been studied. Its value depends in large part upon the tannic and gallic acid present, but its resins, oleo-resins and other constituents enhance its usefulness, and render it more potent in many affections than any preparation of tannic or gallic acid alone or combined. The portion of the plant used in medicine is the rhizome, or the root stripped of its bark. The dose of the powdered root ranges from ten to forty grains. As it is soluble in water or alcohol, it may also be administered in the form of the tincture or the fluid extract. The dose of the former preparation varies from ½ to ij ʒ, and that of the latter from xɱ to ʒ jss. The fluid extract is the most eligible and effective preparation, as it contains all the virtues of the plant. When combined with an equal quantity of simple syrup and diluted with a small amount of water, it is not unpalatable, and will not be rejected by the most fastidious patient.

Therapeutic action.—There are few remedies which possess a wider range of usefulness than geranium maculatum, and which are so devoid of harmful properties. In all forms of hemorrhage, whether internal or external, it is without a superior. Hæmoptysis can usually be promptly arrested by drachm doses of the fluid extract given hourly until the attack subsides. Relapses may be prevented by continuing the same dose at longer intervals for three or four days. Hæmatemesis may be effectually controlled in the same manner after ergot, matico, sulphuric acid, iron, ice, and other styptics have failed. In hemorrhage from the kidneys and the intestinal canal, better results can be obtained from the administration of smaller doses, gtt. xx four times daily, for an extended period. Epistaxis may be speedily checked by plugging the nostrils with cotton dipped in a solution composed of 1 part of the fluid extract of geranium and 3 parts of water; or by syringing the nasal passages with the same solution. Hemorrhage resulting from the extraction of a tooth is occasionally obstinate in character, persisting for days, defying the cautery and other methods, enfeebling the patient and alarming the family; but it can invariably be promptly arrested by filling the socket with a piece of cotton saturated with the undiluted extract of geranium maculatum, and applying firm pressure for a few minutes. Menorrhagia can be most effectually abated by the internal administration of geranium combined with vaginal injections of the same remedy. In fewer cases it may be necessary to tampon the vagina with cotton soaked in a diluted solution of geranium, or to inject the uterus with the same solution. This latter procedure is the most effective method of arresting uterine hemorrhage, but it must be resorted to with caution.

Geranium is also of value in purpura, scurvy, hæmtidrosis, and the hemorrhagic diathesis. It is a most serviceable remedy in colliquative and chronic diarrhœa, infantile diarrhœa, and the diarrhœa of typhoid fever. It may be given with marked benefit in the later stages of cholera infantum, cholera morbus, and chronic dysentery. In the latter class of affections, rectal injections of the remedy appear to be most efficacious, as by this means the medicament is conveyed directly to the diseased portion of the mucous membrane. This is also an effective method of eradicating ascarides.

Geranium is of especial value in phthisis, restraining the diarrhœa, preventing hemorrhage, moderating the fever and night sweats, lessening the cough and promoting the appetite.

In chronic bronchitis and bronchorrhœa marked improvement may be obtained from the administration of

℞ Tinct. nucis vomicæ, ʒ j.
Tinct. sanguinariæ, ʒ j.
Ext. geranii fl., ℥ jss.
Syr. simp., ʒ jss.
M.

Sig.—Teaspoonful in water, every 4 hours.

Chronic gastric catarrh, and the various stomach disorders due to indulgence in alcoholic liquors, can be most speedily remedied by a restricted diet, reformation of habits, and the administration of ʒ ss of geranium 4 times a day.

Cases of anæmia and chlorosis in which iron, arsenic, strychnine, phosphoric acid and quinine have not been of any benefit, frequently improve at once upon drachm doses of geranium before meals. Amenorrhœa and other disorders of menstruation dependent upon poverty of the blood, often disappear spontaneously during a course of geranium.

Aphonia due to nervousness, mild cases of

hysteria, and alcohol trembling, are all benefited by full doses of geranium frequently repeated. I believe that it will also be found of service in the treatment of chorea.

Diluted with 3 parts of water it forms an elegant and effective gargle in relaxation of the uvula and fauces, chronic pharyngeal catarrh. Applied in the same strength with a post-nasal syringe or douche it is without a superior in naso-pharyngeal catarrh. When combined with an equal quantity of water it forms an excellent mouth-wash in aphthæ, scurvy, mercurial stomatitis, and idiopathic softening of the gums. In leucorrhœa, prostatorrhœa, and chronic gonorrhœa, it may be given internally, and also used as an injection in the proportion of 1 part of the fluid extract to 10 parts of water. The injections should not be used more than once every second or third day. Purulent cervicitis, fissures of the cervix, and catarrh of the body of the uterus and relaxation of the vaginal walls can be cured by the application of the fluid extract of geranium, either through the medium of an injection or by the ordinary cotton tampon and application.

The pain and irritation attendant upon fissure of the anus can be removed at once by touching the fissure with the undiluted extract, and a permanent cure effected by continuing the applications 2 or 3 times daily for a few days. Prolapsus ani will usually yield rapidly and not recur if the pure fluid extract be brushed daily over the protruding mucous membrane, and a 25-per-cent. solution be injected into the rectum every second day. Ulceration of the rectum and anus may be rapidly arrested by the same means. The repeated application of the fluid extract will relieve the irritation and lessen the size of hemorrhoidal tumors, and not unfrequently occasion them to shrivel up and disappear. A 10-per-cent. solution of geranium is a useful application in chronic conjunctivitis, granular lids, and corneal ulceration. The undiluted extract is without a superior in the treatment of fissured nipples. It relieves the pains at once, and forms a protective covering over the painful cracks, beneath which the healing process continues undisturbed. Unlike lead, and the commonly displayed agents, it is harmless to the infant, and need not be washed off before nursing.

Geranium is an excellent remedy in various forms of disease of the skin characterized by excessive secretion. In hyperidrosis and bromidrosis, no more effective plan of treatment can be suggested than bathing the affected parts 3 or 4 times a day with a 30-per-cent. solution of the fluid extract. The flow of perspiration is lessened, the fœtor removed, and the patient restored from a state of despondency to one of comparative happiness. Vesicular and purulent eczema, impetigo and pemphigus are benefited by the following lotion:

℞ Extract belladonnæ fl., ʒ j.
Extract geranii fl., ℥ j.
Aquæ, ℥ ij.
M.

Sig.—Apply nights and morning.

The same application will be found both prophylactic and curative in intertrigo, and in eczema and herpes of the genital regions, in persons having a peculiarly delicate skin. It is also efficacious in preventing the development and hastening repair of bedsores, and promoting the healing of old, indolent ulcers. Geranium is the best styptic in the materia medica, but it must not be expected to control the flow of blood from an incised artery. It will check venous or capillary oozing, restrain the bleeding of lacerated wounds, and arrest the hemorrhage following small incised wounds, or various minor operations, more effectually than Monsel's solution, alum, or any of the agents ordinarily employed. It must, however, be employed in the proper manner. To let a few drops fall on the bleeding point will not be sufficient. A small piece of cotton should be soaked in the pure fluid extract and held firmly against the wounded or bleeding surface for a few minutes. A piece of sticking-plaster or an ordinary bandage may then be applied. When this method is adopted stitches need not be inserted unless the wound is deep and the edges gaping. Hemorrhage does not recur, and the healing process begins at once and continues without interruption.

Sloughing and unhealthy sores rapidly assume a healthy appearance when continually bathed with geranium. Vaginal and intrauterine injections are rarely necessary after delivery, but when the fœtor of the lochia or other symptoms demand their employment a decoction of geranium or 10-per-cent. solution of the fluid extract will be as efficacious as solutions of carbolic acid or mercuric bichloride, and far more safe and agreeable to the patient.

Pruritus ani and vulvæ are due more frequently than it supposed to minute fisures of the skin of those regions, or to a relaxed and œdematous condition of the mucous membrane, and consequently can often be promptly relieved by the application of a strong solution of geranium.

Finally, the fluid extract of geranium, owing to the large percentage of tannic acid which it contains, is a convenient and effective antidote in cases of poisoning by iodine, mercury, silver, copper, antimony, digitalis, conium, gelsemium, tobacco, physostigma, belladonna, and aconite. —J. V. SHOEMAKER, M.D., in the *Med. Record.*

LAVAGE IN THE TREATMENT OF GASTRIC AFFECTIONS.—Any agent, or any method which promises to enlarge our therapeutic resources against those obstinate conditions of "gastric catarrh," "functional dyspepsia," etc., that are sources of distress to the patient, of annoyance to the physician, and of profit to the pepsin and patent medicine manufacturers, deserves at least a respectful consideration. The method that I desire briefly to present to the Society this evening—lavage, or irrigation of the stomach—has been employed for many years in Europe, so that it can be no longer considered to be merely on trial. In America, however, it has not won general introduction, nor am I aware that any discussion of it has been had before this body. This, then, is my excuse for calling attention to a subject in connection with which I have nothing new to communicate.

It needed not the discovery of omnipresent bacilli, those evil spirits named "legion" of our modern superstition, floating about "seeking whom they might devour," to enforce the value of cleanliness. The surgeon long ago discovered that clean surfaces would unite more promptly, that a wound kept free from foreign substances and irritating secretions, would undergo a more rapid and more satisfactory course toward repair, than if the conditions were otherwise. In the treatment of the more readily accessible mucous surfaces, whether of the eye, the nose, the throat, the vagina or the urethra, the importance of keeping the parts free from morbid secretions, from the products of desquamation, and other sources of irritation, is not a matter for debate. The extension of the same principle to the treatment of affections of the gastric mucous membrane, is but a question of mechanical detail, not of therapeutic justification.

KUSSMAUL, in 1867, employed a doubly-acting stomach pump to irrigate the stomach with alkaline solutions (Carlsbad water), and it is to this observer that we are principally indebted for a study of the method, mechanically and therapeutically. It is said, however, by DUJARDIN-BEAUMETZ, that a French physician, BLATIN, had proposed the practice in 1832. It is to another French observer, FAUCHÉ, of Paris, who communicated his procedure to the Academy of Medicine in 1879, that we chiefly owe the simplification of the technique by the use of siphonage, a process employed independently by OSER, of Vienna, at about the same time. Others have variously modified the details of instrumentation and practice. Among those who have contributed most to the popularization of the method, is DUJARDIN-BEAUMETZ, who applied to it the name *lavage*, by which it is now described,

The manner of performing lavage, recommended by the latter observer, is that which I have followed in the few cases in which I could induce private patients to submit to it. The results obtained in these cases have been sufficiently encouraging to induce me to continue, at least to propose it, wherever it seems applicable.

The apparatus and its employment are sufficiently simple. An œsophageal tube with blunt, double eyed extremity, of flexible rubber, about twenty-eight inches long, and from one-quarter of an inch to a little less than a half an inch in diameter—practically an enlarged catheter, and made of similar material (the one exhibited having been made by TIEMANN & CO., of New York)–is attached by a small section of glass tubing to a soft-rubber tube about one yard in length, into the free extremity, into which a glass or rubber funnel, of from six ounces to eight ounces capacity, is inserted. Sometimes the free extremity of the œsophageal tube is slightly stiffened.

The patient sits, or stands, facing the physician. The œsophageal tube having been dipped into warm water or warm milk, is placed within the entrance of the œsophagus, and is then propelled by successive pushes into the stomach, the process being facilitated by efforts at deglutition on the part of the patient.

Many patients quickly learn to introduce and swallow the tube without assistance. A mark on the tube shows when a sufficient length has been introduced (say eighteen or nineteen inches). The funnel is then elevated to the level of the patient's forehead, and from it a pint or more of the lavage solution is slowly poured in; the glass junction tube permitting its passage to be watched, and obstruction or attempted regurgitation to be detected. The patient's sensations will usually inform us when a sufficient quantity has entered the stomach. As the last portion of liquid disappears from the funnel, the soft-rubber tube is pinched near the extremity, the funnel is rapidly inverted over a receptacle placed upon the floor; and the contents of the stomach are thus removed by siphonage. These manœuvers are repeated until the returned fluid is clear.

The first introduction of the tube, and possibly the second and third, will occasion more or less dyspnœa, often nausea and retching, rarely vomiting. These effects, though partly physical, are largely psychical, and will disappear with tolerance. The dyspnœa may be immediately checked by insisting on full inspirations. Nausea is overcome as soon as water enters into the stomach, floating the tube away from immediate contact with the mucous membrane. In highly neurotic subjects, it may be well to prepare for the operation, at first, by administering full doses of bromides. I have tried annointing the end of the tube with a solution of cocaine in glycerin, but cannot claim any striking benefit from the procedure. Firm, but skillful handling of the tube is the best sedative.

Sometimes during the withdrawal of the solution, solid particles of food (grains of corn in one of my cases) may become impacted in the eyes of the tube, and the flow of fluid will cease. A little more of the solution must then be introduced, both to wash away the obstruction and to re-establish the syphon current. If the tube should be pushed too far into the cavity of the stomach, it may curve upon itself, and the syphon will not work. Withdrawal of the tube for a few inches, will remedy this; if the flow is not readily established, it is said that it may be favored by manipulation of the stomach; and efforts at coughing may be made by the patient. I have not had occasion to resort to these devices.

When *lavation* alone (washing) is the object of the procedure, a weak alkaline solution is employed; a drachm or two of sodium sulphate, sodium chloride, sodium borate, or sodium bicarbonate, in a quart of warm water, at about 100° F.

Should it be considered necessary, however, various sedative or antiseptic medicaments may be added to the lavage solution. Those most highly recommended are resorcin (1 per cent.), boracic acid (1 per cent.), creasote (1 per cent.), carbon disulphide water (one part of a solution containing 15 grains to the quart, to two parts of water), charcoal powder (two to four tablespoonfuls), chloroform water (saturated), bismuth subnitrate (two tablespoonfuls to the pint).

In the use of agents like resorcin, carbolic acid, etc., the liability to absorption if the solution be not all removed, must not be forgotten. In using what he terms "milk of bismuth," DUJARDIN-BEAUMETZ advises that the solution be allowed to remain a few minutes in the stomach, so as to allow the bismuth to be deposited; after which the supernatant liquid may be withdrawn.

Lavage should be performed when the stomach is empty; therefore, some authors recommend the hour of rising in the morning. I have found noon—say four or five hours after a light breakfast—or the same interval after lunch or dinner, to be more convenient for myself, and to answer as well in most instances.

One lavation daily is usually enough. After a while the intervals may gradually be lengthened, until the process is discontinued.

The therapy is sufficiently obvious. The effects are said to be most marked in cases of dilatation of the stomach, in which delayed digestion, retention and putrid fermentation of the contents of the stomach, give rise to distressing symptoms. In all cases in which the gastric mucous membrane is in a catarrhal condition, coated with the glairy mucus seen amid vomited matters, or bathed in the sour liquid ejected as "water-brash;" in which the production of gastric juice is impeded, or the secretion altered in quality by an abnormal condition of the membrane, extending, perhaps into the tubules, or by the presence of irritative matters; in which fermentation of indigested and retained matters takes place; in short, in the typical case of chronic gastric catarrh or acid dyspepsia, lavage will be found highly useful. It removes any undigested matters remaining in the viscus, cleanses it from products of desquamation and morbid secretion, and gently stimulates the glands and absorbents to healthy action. In gastralgia, dependent upon the presence of irritating matters, and sometimes in cases apparently idiopathic, lavage with the employment of chloroform or bismuth as a sedative, is said to be productive of cure. I have had no opportunity to test the statement personally.

In the chronic gastritis of drunkards, the measure is said to be an excellent palliative, nor is hæmatesis considered a counter-indication, unless actual ulceration exists. In cancer of the stomach it is useful as a palliative measure; and my first practical acquaintance with this method of treatment was made during my student days, in two cases of gastric carcinoma treated after the method of Kussmaul, with doubly-acting stomach-pump, at the hospital of the Jefferson Medical College, in the clinic of PROF. DACOSTA.

Within the last few years two new publications on the lavage method have been found. In 1885, at KUSSMAUL'S clinic, and subsequently by SENATOR, ROSENTHAL, and other observers, it has been successfully employed in the treatment of ileus. KUSSMAUL explains this result by the theory of relief to the tension above the point of constriction, caused by gases and accumulated fæces; with concomitant restoration of normal peristaltic action. Since 1884, LEUBE and other observers have made chemical and microscopical examinations of the gastric secretions and other matters removed from the stomach at various periods of digestion, and claim to have thus obtained valuable diagnostic indications. This subject, however, is beyond the scope of the present communication.

While the practice is usually confined to chronic cases, I have had occasion to resort to it in one case of acute indigestion with obstinate vomiting, in a phthisical, slightly hysterical, female; with gratifying result—in that the vomiting, rebellious to diet and medication, yielded to two applications of the stomach tube. In this case, before withdrawing the tube, warm milk was introduced into the stomach; a measure advocated by French writers. Indeed, there can be little doubt, but that in connection with gavage, or forced feeding, irrigation of the stomach assists in maintaining nutrition in phthisis and other wasting diseases.—S. SOLIS-COHEN, M. D., in *The Journal American Medical Association.*

THE TREATMENT AND PROPHYLAXIS OF ANGINA TONSILLARIS.—The tonsils are (lymphatic) glands, the numerous ducts (lacunæ and follicles) of which undergo many changes, namely, they become distended and elongated, and are thereby converted into cavities filled with viscid secretion and pus; these changes are due to inflammation. The lumen of these altered ducts, as well as those in the normal tonsils, are almost in direct continuation of the lymphatic system, as also with the venous system; this is due to the thinness of their walls, especially those that have undergone pathological changes. If the orifices of these ducts, which open into the oral cavity, become occluded, it will be readily seen how they furnish a most favorable nidus for the development of bacteria and other specific poisons, the germs of which find in these ducts a protected shelter where they develop unmolested.

During the act of deglutition, especially when respiration has been carried on through the mouth, a favorable opportunity is afforded for infectious particles and specific poisons to enter the orifices of the ducts, whence they penetrate the ducts, and there become tightly lodged. That the specific virus of diphtheria, as well as the infectious material of scarlet fever, likewise gain access into the system through the same channel, is undoubted; and that many other infectious diseases also get into the blood in the same manner, seems to me to be very plausible.

The almost simultaneous development of a number of cases of tonsillitis in a certain locality (endemic) is, without doubt, due to the development of the germs in the ducts of the glands, there being an especial predisposition to an attack in those in whom pathological changes, as before described, have already taken place.

My therapeutics in these cases of tonsillitis consists in applying pressure (squeezing) to the tonsils (from below upward) with a wad of cotton wrapped about as thick as the little finger around the point of a dressing forceps, and dipped in a mixture of tincturæ iodi et glycerini, equal parts. The removal of the foreign matters, which have a tendency to cause inflammation, by this method, at first causes some pain, but the relief obtained from it is so great that you will have your patients asking to have it repeated in a few hours. The use of a gargle of potassium chlorate, and the administration, at night, of a moderately large dose of quinine materially assist in the cure.

After the patient has recovered from the attack of tonsillitis, we begin our measures for the prevention of the return of any more attacks, for the patient is bound to have relapses—and you will meet with many patients who have suffered repeatedly from attacks of angina tonsillaris.

For the purpose of putting the tonsils in a condition to resist attacks of angina the ordinary blunt hook will be almost the only instrument required. If you simply inspect the tonsils by using only a tongue depressor, you will not be able to give a positive opinion of the condition of the glands—if they are filled with pus, or if they have become impregnated with substances which are more or less deleterious to the blood; to give a positive opinion you must make use of some hooked instrument (tenaculum). When the blunt hook is made use of in closer examinations of the tonsils and is allowed to glide over the tonsils from above downward it will be found to enter depressions in the gland caused by previous attacks of tonsillitis. From these depressions there will often well up, unexpectedly, a fluid, yellow pus, or the normal secretion of the tonsils which has become converted into thick, hard, caseous particles, and which is often possessed of such a penetrating odor that the fetor which issues from the mouth nauseates the patient and those with whom he comes in contact. In these cases it is best to allow the tenaculum to sink to the base of the depressions and then to perforate the mucous membrane, allowing the opening to appear on the oral mucous membrane and then with a quick motion tear through the intervening membrane; by this means the previously existing cavity or recess becomes converted into a slit or cleft, which, during every act of swallowing, opens, and thereby empties itself, so that no inflammatory products can attach themselves.

The principle of the practice of this trifling operation for the prophylaxis of tonsillitis, is based on the view that there shall not exist, either in the tonsils or posterior thereto, any opening which has not been thoroughly explored to its base and then laid open and converted into a cleft through which the blunt hook must pass smoothly without becoming caught in any pocket.

In some few serious cases, or in some of long standing, it may be found necessary, in addition to the above procedure, to remove a part, or the entire tonsil. In other cases it will be necessary to remove only a piece of the mucous membrane. This latter must be done in those cases in which, in the act of swallowing, the mucous membrane will act as a lid to the fissure or slit, and thereby prevent it from emptying itself of its contents. It is, however, advisable to endeavor to preserve as much of the tonsil as possible, as it is my belief that the fermenting properties of the tonsillar secretion are at least a great help if not an important agent in the process of digestion.

For the purpose of removal there will be required a long hooked forceps, or a dressing forceps, a tonsil bistoury, and a pair of curved scissors for the purpose of cutting down to the base of any pus passage, the base of which is not permeable owing to the presence of a tough scar tissue which may be so dense that it will be found impossible to lacerate it with the blunt hook, and which must therefore be cut open with the scissors. It is, however, much better to tear through than to cut with the scissors (although this may be accomplished, as I have shown, by using a blunt hook, which has its inner edges sharpened), because the wound produced by the scissors will heal up in an undesirable manner. The little operation is finished by applying to the wound—from which there is but little bleeding—a pledget of cotton dipped in a mixture of iodine and glycerin, after which the patient must abstain from the use of warm victuals and drinks, as they may cause pain. A lukewarm gargle, composed of a weak solution of common salt, or one composed of a weak solution of potass. chlorate, should be used; during the summer (if the operation is performed during this time) small pieces of ice may be taken into the mouth; often, however, nothing at all is requisite, because the following day the patients seldom experience any discomfort.

It happens but seldom, and then only in patients of a nervous disposition, that both tonsils cannot be operated upon at one sitting, and these cases seldom require more than two or three sittings. The operation is soon followed by the disappearance of the chronic redness of the gums, a symptom which is always coexisting and a positive proof of the presence of pus accumulations in the tonsils, and any chronic pharyngitis that may have been present will also be found to have greatly improved or entirely disappeared without the use of any medicaments whatsoever.

It is very desirable and favorable to a rapid radical cure that the patient should frequently have the tonsils swabbed with iod. glycerin., so that a healthy mucous membrane results, and one that does not easily bleed and which shall act as a resisting barrier between the blood and lymph systems and the outer world.

There still remains to be discussed the question, whether the prevention of inflammation could not be as readily if not better accomplished by the use of the galvano-cautery, scarification with a knife, or by performing tonsillotomy. The first two of these procedures are without doubt beneficial, because the cavities in the tonsils are thereby laid bare and cauterized. But if this result is achieved, it is more due to "blind luck" than anything else, and still more depending upon chance is the formation of a scar, for after the use of the galvano-cautery it is not always that cicatrization readily occurs owing to the continual contraction; and even if the scar is well formed it is often the cause of the development of new recesses and pus-filled cavities, which, on account of the scar tissue, it will be found very difficult to lay bare.

My argument against the removal of the tonsils with the tonsillotome is, that by this method there is removed more of the secreting mucous membrane of the gland than there is with the galvano-cautery, and also the circumstances, that after the removal of the tonsil it is still necessary to look for and to open the cavities which are sure to remain after the performance of tonsillotomy, and this becomes so much more difficult on account of the dense scar that remains after the use of the tonsillotome. The partial excision for the purpose of lying bare a deep cavity which may exist behind the gland is often imperatively demanded, but may be more easily reached by the use of the blunt hook.

It is advisable (especially in those patients who want to feel assured that they are thoroughly protected against angina tonsillaris) to have them come to your office about six months after the operation for the purpose of inspection, and it is well to recommend

them to call again after the lapse of another six months—preferably during spring or fall—in order to be absolutely certain.

It is in the laying open of the normal ducts of the tonsils in young children who have never had an attack of angina, herpetic or diphtheritic affection of the glands, but who are predisposed thereto on account of the congenitally thick spongy condition of the tonsils, as also by reason of the history of tonsillar inflammation in their families, that we achieve the happiest results. In these cases in children, the ducts may be vere readily laid bare, as they do not penetrate very deeply into the gland; the operation may be made absolutely painless by first applying cocaine. The thickened tonsils rapidly shrink, and their immunity against inflammations seems, according to my observations, up to the present time, to be thoroughly established. It is my belief that children thus treated have also less to fear from an attack of diphtheria than those who receive the most devoted care and attention during such an attack; just as in traumatic diphtheria, where it is surely easier to prevent an attack of it by the use of antiseptic treatment, than it is to cure a case.

I was led to make this investigation by finding in my endeavors to learn the origin of diminution in the power of accommodation, that it was so constantly associated with tonsillitis, and that on the latter being removed the accommodation also improved.—H. V. Hoffmann, M. D., in *Medical News*, Nov. 26, 1887.

Electricity in Amenorrhœa, Dysmenorrhœa and Menorrhagia.—In a paper on Electricity in Gynecology appearing in the N. Y. Med. Journal, Nov. 12, 1887, Dr. A. D. Rockwell says:

In amenorrhœa, electricity is more especially indicated in those cases that are dependent on some constitutional cause associated with chlorosis, and upon imperfect development or atrophy of the organs of generation. It is needless for me to say that in chlorosis and anæmia, amenorrhœa is the natural condition, and efforts to force the menses by any form of local treatment would be entirely out of place. On the contrary, it is, I believe, understood that where menstruation persists long with a decided anæmic condition, the lining membrane of the uterus may itself be diseased and call for local treatment for the purpose of *stopping* the flow. It is in amenorrhœa existing as a symptom of anæmia that electricity, through general and not local methods of application, is especially indicated. It is not to be used to the exclusion of iron and other tonics, but in conjunction with them. Treated in this way, cases of long-standing anæmia—with their associated symptom, amenorrhœa—will recover far more rapidly than when internal medication alone is relied upon. Great mistakes are committed in the treatment by electricity of amenorrhœa associated with anæmia, in applying the galvanic current directly to the uterus.

Localized galvanization is not indicated in these cases; on the contrary, as I have had abundant occasion to observe, it tends to induce a condition of nervous irritation that is exceedingly unpleasant. It is in these conditions of amenorrhœa where the patient is weak and anæmic, with perhaps other indications of constitutional disturbance, that the faradic current is strongly indicated over the galvanic. On the other hand, in those cases of amenorrhœa where the patients are robust and of full habit, galvanism is likely to be of far greater service than either the faradaic current or franklinic electricity.

Another well-recognized cause of amenorrhœa is atrophy, as well as arrested development of the uterus. The well-known power of electricity to variously modify nutrition would indicate its use in these conditions; practically I have found it to be efficacious in several cases, and see no reason why it should not always be of more or less service. In superinvolution, also, it may be tried with expectation of success, provided there is evidence of active ovulation.

If there are no such evidences, the probabilities are that neither electricity nor any other remedy will be of service.

Dr. Fordyce Baker has enumerated the following symptoms at or near the menstrual period as evidence of the existence of ovulation associated with superinvolution: intense headache, flushing of face and congestion of the eyes, pelvic pain and sense of dragging, with nausea, vomiting, etc. It is interesting to note that in the single case of superinvolution that I have successfully treated, all of these disturbing symptoms were present, and all disappeared with the return of menstruation.

I may add that in this case the condition followed a dangerous and difficult labor. For two years menstruation had appeared but once or twice, and upon measurement the uterus was found to be but one inch and three-fourths in length.

Dysmenorrhœa.—Speaking from no inconsiderable experience in the treatment of the disorders of menstruation, I confidently assert that the greater number of cases of dysmenorrhœa, taking the cases as we find them in ordinary practice, can be very much relieved by electricity and many of them permanently cured. From this standpoint, therefore, it seems to me not a little singular, as well as a notable defect, that the subject is dismissed with such brief notice, and sometimes not even mentioned, in most treatises and monographs devoted to the diseases of women. Obstruction to the free flow of blood must be regarded as the main cause of painful menstruation, and when this obstruction is due to mechanical causes, such as stenosis, the electrolytic method is to be used.

In the vast majority of cases, however, while there may be found changes in the lining membrane of the uterus, there yet exists no serious structural change or mechanical obstruction. Whatever the condition of the endometrium, which fails to allow the free flow of blood into the cavity of the uterus, thus causing distension and pressure with pain of greater or less severity, the free and steady flow of the galvanic current through the uterine organs is most efficacious in relieving this congestion and preventing pain.

It should be applied just before menstruation and repeated every day if necessary until the flow appears. In those cases where there is usually a long struggle and great delay I have, by these applications, frequently caused the menses to appear promptly on time, and without the slightest suggestion of pain.

The faradic current will occasionally relieve dysmenorrhœa, but for obvious reasons it has no such influence over the condition as galvanism. Another case of dysmenorrhœa, for the relief of which I have good reason to place great faith in the absorptive action of the galvanic current, is the pressure occasioned by the exudations following attacks of pelvic cellulitis. In these cases the treatment must often be prolonged, and months may be consumed in the efforts to dissolve the products of exudation, but the results that follow more than compensate for the time and trouble expended.

Menorrhagia.—The medical use of electricity has not such influence over excessive as it has over painful menstruation, although electrolytic treatment when uterine fibroids or polypi are the causes not infrequently effect most marvelous changes. I have, however, met with several cases of menorrhagia occurring toward the decline of sexual activity where simple external applications by the method of general faradization have proved most effective measures of relief. These cases are generally associated with constipation, torpidity of the liver, and often with nervous exhaustion, and the indications are excellently met by the powerful constitutional effects of this most valuable method of treatment.

When discussing the subject of electricity, my inclination is always to dwell upon and emphasize the importance of general faradization.

For twenty years it has been an indispensable part of my practice, and the enunciation that I have made of its range of usefulness I see no reason now to change. It is an old story, and I will not further dwell upon it, but would urge every one who uses electricity at all to make himself familiar with the *rationale, modus operandi*, and effects of general faradization.

Sub-Benzoate of Bismuth. An Escharotic.—In the treatment of a phagedenic tendency in several cases of chancroids in the venereal wards of the Philadelphia Hospital the writer, then on duty as a resident physician, became satisfied of the faulty character of the local measures, in that the escharotics usually employed were too severe for use, except with anæsthetics, and had to be applied too rapidly because of their excessive action. Recalling certain characteristics of several benzoates a combination of that acid with bismuth suggested itself as of possible service; and acting upon this idea, Mr. Joseph W. England, Chief Druggist of the Hospital, kindly prepared a quantity of the oxy- or sub-benzoate for trial.

Bismuth subnitrate was treated with nitric acid, heated and dissolved. To this, hot water in small quantities at a time was added until a opalescence was obtained; and the solution thus prepared added slowly and with constant stirring to a solution of sodium benzoate in water.

The white precipitate was collected, and washed with alcohol to separate any free benzoic acid or sodium benzoate, and then dried. The chemical reactions upon which these steps are based are in Mr. England's opinion probably as follows:

$BiONO_3 + 2HNO_3 = Bi3NO_3 + H_2O.$

$Bi3NO_3 + NaC_7H_5O_2H_2O = BiOC_7H_5O_2 + NaNO_3 + 2HNO_3.$

In the second equation the bismuth salt is precipitated and the nitrate of sodium and nitric acid separated in the filtrate, in which is present also a quantity of free benzoic acid. After drying, a smooth white powder, of a relatively light specific gravity, was obtained. This was employed in dressing the chancroids, just as iodoform or other antiseptic powders are used; the sore being carefully cleansed, a little of the powder was dusted over the surface and the dressing completed with some simple bland ointment. For a short time no sensation whatever was experienced, then a warmth of the part, and in about ten minutes a burning and tingling sensation manifested itself and continued for several hours—not severe enough in character to render the patient positively uncomfortable, except from excitations of the part, which were afterward controlled by camphor or bromide of potash administered internally, or by adding a little morphia to the bismuth salt in dressing the sore.

The dressing was renewed once or twice daily, and the bismuth powder employed until the type of the sore had changed—within seventy-two hours in the three cases under the writer's care, the unhealthy purulent surface becoming clean and red with active granulation. After this point had been reached iodoform was substituted for sub-benzoate and the sores allowed to heal, which they did thoroughly and quickly.

This material is undoubtedly a mild escharotic when thus applied, with a slow and continued action; but erodes the unhealthy tissues gradually and comparatively painlessly, thus avoiding the inconveniences of such powerful caustics as nitric acid and bromine.

It was used as an occasional dressing for indolent leg ulcers with marked benefit, stimulating the sores into granulating surfaces, and cleaning off the peculiar glazed coating such ulcers often present, just as an occasional application of nitrate of silver would do.—By Allen J. Smith, M. D., assistant demonstrator of pathology in the University of Pennsylvania.

Unna's Treatment of Chronic Urethritis.—For this obstinate and annoying affection Unna ("Monatshft. f. prakt. Dermat.") proposes to use sounds coated with a salve composed as follows:

Cocoa butter, 100 parts.
Yellow wax, 2 to 5 parts.
Nitrate of silver, 1 part.
Balsam of Peru, 2 parts.
M.

This coating hardens at the temperature of of the room, but melts at the temperature of the body. The mass is put into a dark bottle melted in a water bath, then is allowed to cool while being shaken, and when still fluid is poured over the sound held in a vertical position. He prefers to have the sounds made of tin or pewter, excepting in those of No. 10 to 15 F., which should be made of a stiffer, though still supple, material. While the coating is hardening the sound should be turned between the fingers to smooth the coating, and just before it is used it should be passed through the next or second higher number Charrière metal

scale, so as to procure an even coating. As light deteriorates the silver, the sounds should be kept in a dark room, or, better, they should be protected by some pigment which absorbs the chemical rays of the daylight. The best for this purpose was found to be coloring matter of the curcuma; 15 grains of the curcuma powder, being mixed with 1,500 grains of the mass, imparts to it a canary-yellow color. The sounds are to be hung up in a vertical position in a cabinet. These sounds, thus prepared, are of special use in case of old stricture, accompanied by a slight amount of discharge, and are contra-indicated where the discharge is profuse. In comparatively recent cases of gonorrhœa the sounds are to be used every second or third day. In very chronic cases of stricture the sound of proper size is to be passed through the same and allowed to remain in the urethra for five to ten minutes at first, afterward for thirty minutes. The sounds are increased in size just as is the custom with the ordinary kind. These coated sounds are recommended also for use in chronic urethritis in women, in rectal strictures, in neuroses of the genital arising from conditions of mucous membrane of the urethra, and in spermatorrhœa arising from relaxation of the ejaculatory ducts.—*N. Y. Med. Jour.*

ICHTHYOL.—Ichthyol has now been in use some years, and bids fair to maintain its original reputation as a valuable medicament of very wide application. It is employed pure in rare cases, but more frequently in solution in water, oil, or glycerin of the strength of 20 to 50 per cent., for external applications in bruises, sprains, rheumatism, burns, chilblains, etc. It may be administered internally in 1-per-cent. solution, or in the form of pills, in cases of chronic skin disease, gastric affections, and rheumatism. As a spray in 10-per-cent. solution it has been employed in the treatment of throat and nasal affections. Ointments of various strengths are compounded for external inunction in erysipelas and rheumatism. An alcoholic ethereal solution of the strength of 10-per-cent. has been successful in relieving neuralgia when sprayed on the painful region; stronger solutions are used for sciatica and lumbago. Plasters and fomentations of ichthyol are also used, and a soap is made for preserving the skin and relieving chapped hands and kindred ailments.—*Lancet.*

BROMIDE OF ETHYL.—The value of bromide of ethyl as an anæsthetic in minor surgical operations, has recently been the subject of an address by DR. PAUSCHINGER (*Munsch. Med. Wochenschr.*) The conclusions drawn by him from the results of several trials were that the compound presents important advantages:

1. Because its freedom from danger allows of its use in minor, though painful operations, in which the use of chloroform would not be justifiable.

2. Its easy toleration, which spares the patient the disagreeable phenomena attending the chloroform narcosis.

3. Its convenient management which makes it possible for a practical operator to use it in cases of need without an assistant. These advantages are combined with a rapid and effective anæsthetic action.

RED HAWTHORN IN UTERINE HEMORRHAGE. The root of the Cratægus officinalis, or red hawthorn (Russian, *Kransy bioaryshnik*), has been from time immemorial urged by the Russian peasantry as an excellent remedy for uterine hemorrhage of all kinds. With the view of testing its value, DR. E. M. JDANDO, of Piatsgorsk, recently gave (proceedings of the Russian Balneological Society of Piatsgorsk, Aug. 29, 1887, p. 35) a very strong decoction of the root to a lady, aged fifty-two, who was suffering from frequent profuse floodings caused by uterine fibro-myoma, for which most of the usual hæmostatics had been tried in vain. The use of hawthorn completely arrested the hemorrhage. DR. JDANKO therefore suggests that a fair trial should be given to this popular remedy.—*N. Y. Record.*

THE TECHNIQUE OF ANTIPYRINE HYPODERMATICALLY.—HIRSCH, of Hanover, has used a fifty-per-cent. solution of antipyrine by hypodermatic injection for pain, with excellent results. He finds that the needle frequently clogs with crystals of antipyrine. He finds that five-per-cent. carbolic acid solution is the best dissolvent for these crystals. The carbolic solution should be drawn through the needle until it remains clear in the barrel, when no antipyrine is present. If antipyrine is present, a cloudiness will result from the union of carbolic acid and antipyrine.—*Berliner klinische Wochenschrift.*

COCAINE IN STOMACH AFFECTIONS.—SALET, of St. Germain en Laye, has come to the following conclusions:

1. Cocaine acts on the mucous membrane of stomach and intestines just as certainly as on the external mucous membranes.

2. That the effect may be perfect, the secretion of the stomach and intestines should be increased and the cocaine united with an alkali.

3. To this combination morphine should be added to prolong the effect as far as possible.

EXTRACT OF COCA IN GASTRALGIA.—It has been found that in various conditions of the stomach accompanied by pain, especially in the forms which occur independently of structural lesions, the effect of the extract of coca is to give great and immediate relief. The extract answers better than any other preparation, and is besides less expensive.—*Med. Press*, Nov. 16th, 1887.

PHTHALATE OF MORPHIA.—HERR BOMBELON, writing in the Pharmaceutische Zeitschrift, strongly recommends the phthalate in preference to other salts of morphia for dispensing and hypodermic use. It is prepared in the form of small vitreous laminæ and by a process similar to that by which other "scale preparations" are produced.—*Lancet.*

The Medical Age.

Vol. VI. DETROIT, JAN. 25, 1888. No. 2.

Original Articles.

THE DIFFERENTIAL SYMPTOMATOLOGY OF TYPHOID FEVERS.*

BY E. P. CHRISTIAN, M. D., WYANDOTTE, MICH.

It has seemed to me that the observation of the peculiarities and variations in type and symptoms of individual cases of typhoid fever, where a number of cases have occurred and run concurrently, or immediately consecutively, in the same family or in immediate neighborhood, and known to have identity of originating cause, might be useful in the settlement of the disputed question of a typhoid and a typho-malarial fever.

In the MEDICAL AGE of Nov. 10th, 1887, DR. MC COLL, of Lapeer, under the title of "How Typhoid Fever is Spread and How It May be Prevented," gives the history of an outbreak of that disease in which it appears that cases broke out concurrently in at least four different houses, all using water from the same polluted well. Here were quite a number of cases, eight or ten at least, with identity of originating cause, and presumably the individual cases differing widely in special characteristics and probably in prominent phenomena presented.

It would be interesting to know how far, any of these cases named differed from the typical typhoid, in what particulars, and whether any one of the cases occurring under such circumstances as would have afforded the attending physician no knowledge of its cause, of origin or relationship to the other cases, may not have presented such a variation in type and symptoms from the other cases as would have justified its classification as a case of typho-malarial fever. If for instance, one of them having left the place during the stage of incubation and come down sick at another place and under care of another physician having no knowledge of the other cases arising from the same cause or of the exposure in this case, whether any one of them might not have presented under such circumstances a fair example of so-called typho-malarial fever. For the purpose of the study of the subject from this stand-point I propose to give a history of several similar, though more limited, outbreaks of the disease, to that of DR. MC COLL, with reference to noting the variations of individual cases.

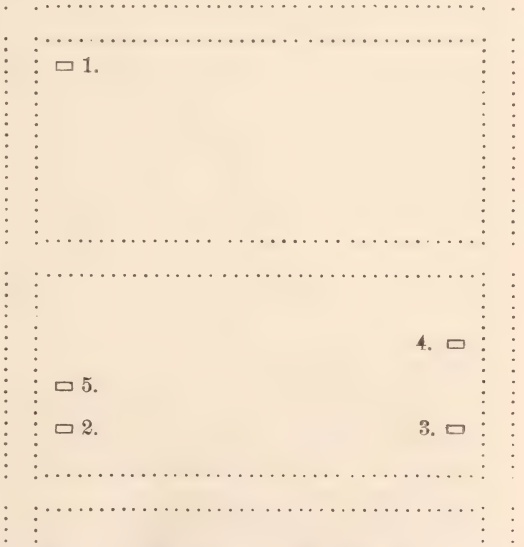
*A paper read before the Wayne County Medical Society.

Oct. 25th, 1881, I was called to family of a MR. ANDREWS to attend Willie, a young lad. The schedule of cases as they occurred in this family, and duration is as follows:

Willie, young lad, Oct. 25th to Nov. 29th—36 days.
Della, girl of 13, Nov. 29th to Jan. 17th—48 "
Frank, young man, Dec. 27th to Jan. 17th—22 "
Mrs. A., mother, age 50, Jan. 10th to Jan 31st—22 days.
Annie, girl, age 15, Jan. 17th to Feb. 17th—22 days.

Five Cases—Total sick days, 150—Daily attendance 106 days.

These cases were, respectively, free from fever, diarrhœa, etc., and otherwise so far convalescent as to require no further visits only after the number of days appended to each case, viz. the first case 36 days, the 2nd case 48 days and each of the others respectively 22 days. Four of the cases: the children's were all typical cases of enteric fever; but with the mother, though she was sick 22 days, as long as two of the others, the fever at no time ran very high, the pathognomonic symptoms were not marked, and had the case occurred alone, by itself, it is questionable whether it would have been regarded otherwise than as a case of bilious re-



mittent or perhaps typho-malarial. In all others the temperature ranged as high as 104°, evening temperature, for at least two weeks, and in one for a time, 105°.

In Nov., 1886, I was called to attend a young girl, of 12 or 13, in the house on the plat marked No. 1, which turned out to be a typical case of

enteric fever running a course of about 28 days. During all this time and for some time longer, I was in attendance upon Mrs. K., a lady of perhaps 35, at house marked No. 2, nearly two blocks distant from No. 1. The marked peculiarity of this case was great cerebral disturbance at the outset, intense maniacal excitement lasting for perhaps 48 hours, controlled in a measure by large doses of chloral; and delirium lasting through first week or more of the fever. Although I called the case one of typhoid fever it was very far from being a typical case of enteric fever, and presented quite as much the characteristics of cerebro-spinal meningitis. I was in attendance from Nov. 10 to Dec. 9, just 30 days. During this period I was in attendance at houses marked 3 and 4 on the plat, one block north, upon young children of five or six years of age, each of whom passed through a continued fever of two or three weeks' duration, which was also called typhoid, but were far from being typical cases of enteric fever. Each of these cases had mild attacks of epistaxis, which I consider a far more constant and pathognomonic symptom of typhoid than almost any one of those mentioned by DR. PIERSON CHAPMAN, in his classification of differential diagnostic symptoms of typhoid and typho-malarial fever, in a paper recently published in the Maryland Medical Journal, and copied in part in the MEDICAL AGE. Among these symptoms no reference is made to this as a symptom or common occurrence in typhoid. At the time of the concurrence of these cases I did not know what I subsequently learned, that all the families were procuring their drinking-water from the same well, that of the house marked No. 2, and that the little girl first attacked, at No. 1, two blocks distant, had been living as nursery maid at house marked No. 5, next door to No. 2. It is a little singular, perhaps, that in all these houses, in which a single case occurred, there were many more persons, children as well as adults equally exposed. We may infer from this fact, I suppose, that only in those who sickened did the microbes which entered the system find the necessary conditions for development and propagation.

Dec. 1, of this same year, Ed. Reichenbach, a young man 21 years of age, came under my care, whom I attended till the 22d, twenty-two days, and was then convalescent from a typical case of enteric fever.

December 28th, six days after discontinuing my visits to the young man, I was called back to see a younger sister of twelve or thirteen, who had come home sick. I found her at my first visit with a temperature of 105°, evening. This case ran its course in 14 days, temperature rapidly subsiding from the first day, and answered in its general characteristics to what DR. PIERSON describes as the characteristics of typho-malarial fever, with this exception, that within a few days of its outset a very decided rose eruption manifested itself, gradually fading out in a few days. This sign DR. PIERSON gives, as well as other writers, as one of the characteristic signs of typhoid. In my own experience I have seldom found it recognizable.

On July 13 last, I was called to Ecorse to visit Mrs. Kaulph, who had then been sick for at least one week, she was seven months advanced in pregnancy. I attended her till convalescent on the 29th of the month, having been in attendance 19 days, but as she had been sick sometime when I was called in, it is probable the fever held for 25 or 28 days. Typhoid was prevalent in the neighborhood, I had several cases of that disease about there and I called it typhoid. At the same time I supposed it might as appropriately be designated typho-malarial or bilious remittent as regards any prominent differential characteristics. Aug. 7th, nine days after I had discontinued my visits to the mother, I was called to a child of about 6 in same family, but who had been sick, as the mother told me, since I stopped coming. This case proved one of the worst and most distinctly marked cases of enteric fever which I have seen for years to finally recover; the child was deaf and aphasic for weeks and did not recover faculty of speech for many weeks and then but slowly. She was ill about two months.

On August 18th, the father, age probably about 35, took to his bed and had a severe run of distinct enteric fever. He was ill about 21 days. Whilst the father was ill a younger child, a boy of 4, came down with malignant diphtheria and died on the third or fourth day. Other children escaped all sickness. This family used the river water altogether, as did most of the denizens of the Ecorse village, among whom were many cases of typhoid.

I hope it will not be considered an unpardonable digression from the scope of this paper if I here make a brief reference to a consideration of the possible causes of the unusual prevalence of typhoid fever and diphtheria, and in severe types, at Ecorse, during the past two seasons. Both these diseases have been unusually prevalent and malignant, especially the latter disease at this place, since the garbage of Detroit has been deposited in the marsh above Ecorse village, where the river water is used almost exclusively. I do not undertake to affirm that there is in this a relationship of cause and results, but the people of Ecorse are decidedly of that opinion. By looking at the map of the river, one will observe that at the head of Fighting Island, a mile above Ecorse, the river widens out from the narrow channel which conveys the water past Detroit with a swift current. Thus the current becomes slackened, and at Ecorse is a deep bay still further widening the waters and

slowing the current past this point. An easterly wind raises the water at times from two to three feet, a westerly wind correspondingly lowering the surface. This easterly wind raising the water washes out the floatable garbage from these marshes, and the same wind which raises the water and washes the marshes also drives all floating garbage to the westerly side of the river and over into the still waters of Ecorse Bay, and not all of it is carried past, but often much left by the receding water deposited along the shores, and thus the waters become polluted.

While writing the above I incidentally came across the following newspaper excerpt which is pertinent: "Typhoid Ice. Regarding the ice consumed by New York and Brooklyn, mainly cut from the Hudson river, DR. PRUDDEN after a careful analysis of the ice" says: "Typhoid fever and possibly cholera might easily be spread among the consumers of the ice which is formed on the Hudson." He finds that "on the average, a pint of the melted ice contains about 500,000 living bacteria of various kinds." "It is certain," continues DR. PRUDDEN, "that the ice from some parts of the river must contain the bacteria of typhoid, and that these may be taken into the system with ice water in a living condition" If this danger pertains to the ice of the Hudson above these cities what must be the condition of the water immediately below, where the whole garbage of a large city is cast in to become polluting flotsam, and only a little further from where the whole of the city's sewage is emptied into the current.

In consideration of this I would respectfully suggest that this society help us below with their influence towards having a change made, and that the city's garbage instead of being floated down below the Rouge and then deposited, that it be carried up to Grosse Pointe, beyond the water works, where it will have a wider expanse of water to dilute it. As regards the sewage I suppose we must even be content to sup on that until avarice and science with combined and persistent efforts have found a way of economically converting it into money. But we emphatically object to having both meat and drink from this supply.

To return to our topic, why should it be thought by any one an improbable thing that two poisons may produce specific manifestations of their action on the system in the form of disease, at the same time, or that a specific disease may be modified in its symptoms or virulence by the pre-existence in the system of other disease germs or of their effects? Is it not in accordance with all analogy of the manifestations of diseased action? Is it not well-known that what we call malaria or its constitutional effects remain dormant in the system, and may be excited into action by depressing effects of cold, fatigue, injury, and even by child-bed confinement; and why not by another disease? One living in a malarious locality may go along comfortably without any outbreak until some one of these depressing causes interfere, when we may have a regular paroxysm of a quotidian or tertian, or perhaps a severer form of continued fever. Many a woman in such localities has a regular paroxysm as regularly as she goes to the wash-tub or ironing-board to do the week's washing and ironing, escaping altogether if she delegates this business to another, and so constantly, in some localities, is childbirth followed by an outbreak of this kind, at certain seasons of the year, in from five to seven days, or perhaps longer, that the necessity is well understood by the physicians of anticipating and preventing this by a sufficiently liberal administration of quinine; and after wounds and other accidents the same necessity is well known to exist. Indeed, an indigestible meal is often all that is necessary to excite it into action. But more, are there not analogies enough of two specific diseases, and acute ones, running along together? Is there not a strong presumption that scarlet fever and diphtheria co-exist in some patients? And who does not know that variola and vaccinia may run along together, the latter several days in advance of the former, and though it may be said that the latter is but a modified form of the former, yet this fact ought to increase the improbability of their co existence, instead of being urged as a reason in explanation of it.

Then, again, vaccinia may co-exist with scarlatina and rubeola, and all these may doubtless be modified by co-existing malarial intoxication. Why then, according to all analogies, may not enteric fever be so modified?

Again, may not the entire *ensemble* of symptoms vary in localities? For instance, DR. CHAPMAN, in the paper to which I have referred, speaks of the rose eruption as one of the differential symptoms characteristic of typhoid. He makes no mention of epistaxis in same category. How often shall we find the rose eruption present in entire fever in this locality? I confess to a more often unsuccessful search for it than otherwise, and, on the contrary, seldom find the epistaxis absent in enteric fever. Another point to which I would particularly refer is the great liability to aggravation of symptoms, and, when convalescent, to relapses in enteric fever, from imprudences in diet.

To speak of relapses in the symptomatology of fevers, in relation to the subject of differential diagnosis, would be like taking evidence after trial and sentence, but in its relation to the natural history of disease, it may be pertinent to refer to it, and in doing so, to the difference between the relapses of enteric and malarial fevers. While in the latter case they are more likely to occur after an entire cessation of the fever, and

to present a hebdomadal character, and to present a decidedly remittent or even intermittent type, in enteric fever aggravations may occur at any time, and relapses after the fever has abated and convalescence is established, from imprudences in diet, sometimes of a such a seeming trifling character that the patients and attendants can not be persuaded of the cause, and when they are conscious of it, are seldom candid enough to acknowledge the error, and the physician is often left in entire ignorance of the cause of the change. In a recent case, a young woman of about 25, who was progressing favorably and who was left comfortable in all respects at my visit on Monday, on Tuesday early, being sent for with urgency, I found great aggravation of all symptoms, increase of fever and such tenderness over whole abdomen as caused me to fear peritonitis from perforation, especially as by closest questioning I could get no admission of any error in diet or indulgence of any liberties in that way, beyond what had been permitted. She recovered and I afterwards ascertained that she had eaten, the evening before the relapse, some kind of a cake which as it was making her feel uncomfortable she thought to get rid of in the night by taking some cathartic pills which failed to operate and, of course, aggravated the trouble. The constipation following the taking of these pills was one of the most troublesome conditions to overcome.

In another recent case, in a young lad to whom I was called in the absence of the physician who had attended him through his fever. He was down, as he said, with a second relapse. I found him with a morning temperature of 104°, profuse diarrhœa, at least frequent discharges and great soreness over the abdomen, with dry, red tongue, etc. I asked, "what are you eating?" "Oh, potatoes and cabbage," he replied. "Well," I said, "I do not believe I can do you any good if your parents have not got more sense than to give you such food, and you have not sense enough to refuse it. However, if you will take only such as I tell you, you may get well yet. If you will take nothing at all but milk and one-third water to that, and take this medicine," handing him a prescription for a turpentine emulsion, a teaspoonful 3 times a day, "it may help you, as you seem hard to kill." A week afterwards I met the father on the street, who wanted me to go to his house again. "What?" I said, "you want me to go and see that boy again?" "Oh no," he said, "he is all right: I want you to go and see another sick one." And so I found the lad, out and around free from pain, diarrhœa checked and tongue moist, and still abstaining from potatoes and cabbage as an unsuitable diet for typhoid fever.

A FEW FATAL CASES IN OBSTETRIC PRACTICE.

BY DR. SAMUEL BELL, PORT HOPE, MICH.

Our metropolitan journals and a large percentage of our more cosmopolitan medical literature abound chiefly with labored articles of the specialist on his particular line of practice. Every journal, almost, which comes to hand teem with reports of the unprecedented success of some would-be gynæcologist who has invented this or that instrument which is an improvement upon all others in some particular, in his hands; elaborate and exhaustive articles reporting cases of laparotomies, Alexander's operation or other operations demanding superior skill and precision. A mild criticism might also be applied to the doings of some of our societies. The time is often occupied by some specialist exhibiting some very rare case which happens to present itself to him for treatment, while nine-tenths of the rank and file of the profession would derive very little benefit from it, and important time occupied which might be utilized in the discussion of improved methods of dealing with some of the more common forms of diseases which are met with by almost every practitioner in general practice. While in the east a few winters ago I was a weekly attendant upon a clinic of a rising gynæcologist, and notwithstanding the abundance of clinical material, the clinician invariably selected a patient upon whom he would perform Alexander's operation. A few cases were interesting and instructive although perceived from quite a long distance, as must of necessity be the case in a large class and a large building. But every clinic during the four months of my attendance presenting the same operation it became rather monotonous and precious time was spent to very little purpose. But the operator had an object in view which he was accomplishing at our expense, to a large extent. Since that time I have seen a tabulated report of some thirty cases of the same operation, showing the success obtained during the above series of operations.

The object of this short article is simply to give a brief resumé of a few of the conditions which present themselves to the obstetrician in his daily peregrinations. During the early part of professional life I was called about 3 A. M. one morning in March, a short distance in the country to attend a case of confinement. Arriving at the domicile I found a multipara and labor well advanced, but very slow and tedious. Examination per vaginam found os uteri well dilated, no liquor amnii present. Upon inquiring of the mother I learned that the waters had ruptured and passed off a week previous. The child had descended into the pelvic cavity, in the L. O. P. position. After a very tedious labor and severe pains the child was born. As is my usual custom, I prepared a ℥ of

fluid extract of ergot as speedily as possible. But upon again turning to the bedside found my patient moribund. I at once gave stimulants, but prostration continued. I did not deliver the placenta immediately, thinking that by leaving it in situ a short time there would be opportunity for an arrest of hemorrhage, as I suspected internal hemorrhage. After waiting as I thought a sufficient time for my patient to rally, I delivered placenta. She revived for a short time and then died from exhaustion.

In March, 1885, was called out about four miles, at 5 A. M.; found a multipara in her seventh labor, a fairly well-nourished German woman. Vaginal examination revealed the hand presenting, it had made its exit from its position in utero by the assistance of the omnipresent, meddlesome mid-wife. Patient had been in labor for 12 hours upon my arrival. I found the uterus firmly contracted down upon its contents. I attempted podalic version but could not make any progress alone. Pains were frequent and severe. I sent for assistance and P. O. WAGNER, M. D., of Sand Beach, responded. After partial anæsthesia we eventually succeeded in performing version, and delivered the mother of a still-born fully developed fœtus. Our attention concentrated on the mother as there was no uterine action, on account of exhaustion. The action of the heart began to decline, and notwithstanding the fact that all the remedies we could command were thoroughly used, she passed away three hours after delivery, having been sick less than twenty-four hours. Another fatal case occurred in my practice on the the morning of the tenth of November last. Was called at five A. M.; drove in the country six miles. Patient was a young German woman in third confinement; she had been in labor for twelve hours. A midwife had been called at eleven P. M. and attempted delivery; failing, despatched a messenger for me. I found os uteri well dilated, occiput posterior lodged at the superior strait, the shoulder presenting. The uterus had contracted and firmly bound down its contents; the liquor amnii had passed off six or seven hours before. I first attempted to disengage the shoulder and bring the head into position. After trying my skill thoroughly and failing. I attempted podalic version, but failed to reach either extremity. Then called medical assistance, but before reaching her the woman passed away. Had I been called when labor fist began, before the liquor amnii had passed off, in all probability the life of the mother would have been saved.

The above three deaths occurred among my German patients. It is the custom of many of our German people in this section of Michigan, in order to save the fee of the doctor in confinement, to call in some neighboring midwife, who is as ignorant of the natural laws which govern parturition as the infant unborn.

In two of my fatal cases, the hand presented. The waters came away and the midwife pulled upon the hand; by so doing wedging down the contents of the uterus so firmly that version was impossible with safety to the mother, not taking into consideration the life of the infant (which was dead before my arrival).

Another particularly sad case occurred a short time ago in this town, which further illustrates the danger and responsibility which these ignorant women will assume. A large, healthy woman was passing through her seventh confinement; labor was always normal, and no physician was ever employed. This time the child was born natural, but the third stage of labor did not progress so well. Hemorrhage set in (no one present but the brutal husband and ignorant midwife). The mother began to sink and the minister (Lutheran) was despatched for, and, lastly, after the patient became moribund, the physician, who arrived just in time to see her pass away.

Many cases similar to those above narrated have occurred in this part during my residence here of seven years. Nothing will ever put an end to such criminal negligence but the strong arm of the law. If I interpret the present law aright, there is not a section of it that can be applied to those ignorant women, as long as they do not prescribe medicines. The time is ripe for such a law as will throw a greater safeguard around innocent bearing women and relegate these meddlesome midwives to their domestic domiciles, where their services are greatly needed, and more in keeping with their abilities. Any act to be framed in the future should embrace the above class of individuals.

UMBILICAL HERNIA.*

BY WM. B. ATKINSON, M. D., PHILADELPHIA, PA.†

Gentlemen:—The case which I now show you is that of a child about five months old. It is one of those unfortunates which has been deprived of its natural nourishment, and is fed artificially. It is much emaciated, quite costive, having an evacuation of hard fecal masses not oftener than once every second or third day; occasionally rejects its food, which comes up in cheesey lumps. An examination of the child shows that it is the subject of quite a good-sized umbilical hernia. We are informed that it was born in this condition, and that the tumor has much increased, especially within the last month. This is quite commonly met with in infants. It is frequently congenital.

*A clinical lecture before the Medico-Chirurgical College.
†Professor of Diseases of Children and Sanitary Science.

but is also caused by the crying and straining, especially, as in this case where the infant is compelled to strain quite hard in order to have a passage.

(Dr. A., related the case of a woman who had such a hernia for many years, and which had attained an enormous size, fully equalling that of her head.)

Now gentlemen, we find this is readily reducible, as you see it at once disappears when pressure is made upon it. But we must contrive a plan by which to hold it within the abdominal cavity. A variety of pads have been proposed. Generally, a flat piece of lead, or an old penny, which some of you may remember was of quite a good size, maintained over the opening by means of slips of adhesive plaster, will do all that is needed. Of course, the pad is completed by being well wrapped in cotton or patent lint.

Next we must endeavor to prevent this condition of constipation, which not only keeps up the trouble, but constantly tends to make it worse.

We must instruct the nurse as to the best food under the circumstances.

(The doctor then explained to the nurse how often and on what form of food it would be best to feed the child.)

To correct the general condition of the alimentary canal, we shall order the cascara sagrada (also known as rhamnus purshiana). In many cases, both adults and children, I have found this article to act well as an "alimentary tonic." It appears to relieve constipation by toning up the bowels. We have been employing it for several years, and rarely find it to fail of good results. We will here use the fluid extract, though we have also an elixir which is a very palatable form of administration.

℞ Ext. cascaræ sagradæ, fld., fl ʒ ij.
Syrup simplicis, fl ℥ ij.
M.
Dose.—One teaspoonful every three hours.

The case was seen three weeks later, was quite relieved of its constipation, and was greatly improved in its general appearance. The nurse informed the doctor that it had entirely ceased to strain, or to throw up its food. An examination of the hernia showed that the tumor was retained very readily by the transverse bands of plaster. The case was dismissed with instructions to continue the medicine in reduced doses, and also to guard well its hygienic surroundings.

The doctor informed the class that in older people he frequently added tr. nux vomica to the cascara, so that each dose would contain about three drops of the nux vomica and about ten to fifteen of the cascara, adding sufficient syrup of orange peel to make one fluid drachm, and repeat three or four times a day.

A CASE OF NEPHRECTOMY.*

BY CHARLES T. PARKES, M. D.†

Last July I received a communication from a friend out of the city, stating that a patient had come under his charge who had been suffering for two years with cystitis, the diagnosis being based upon pus in the urine.

When I returned from my vacation in September, I found the patient awaiting me at one of the hospitals in the city. Upon examination it was found that a tumor could be easily palpated in the right side of the body beneath the ribs, large enough to extend down to the superior spinous process of the ilium, and reaching up to the hypogastric region below the liver. Upon the usual attempts at palpation and percussion, the dulness over the tumor was found to be continuous with the dulness of the liver. But the tumor appeared to me to be so elastic as to present some of the characteristics of a sac containing fluid. So I introduced an aspirator needle into it, and as was expected, found pus. As it presented none of the usual symptoms of a perinephritic abscess, it was diagnosticated to be a case of suppurative disease of the kidney, communicating with the bladder through the ureter, the bladder being the outlet of the pus. There was no apparent disease of the bladder itself, other than that which would be present as a consequence of the foreign substance in the bladder.

Obtaining the patient's consent to an operation, an incision was made over the tumor to the outside of the erector spinæ muscle, and the tumor was exposed; then the pockets of pus in the organ were located by the hypodermic syringe. On this occasion, three pockets of considerable size were opened, and drainage tubes introduced. About a pint of matter was let out. It was decided that these three pockets, that were found by introducing the syringe in different places, did not communicate with each other: they were separate cavities, and I think that is the usual condition found in this sort of disease of the kidneys.

One of them opened freely into the pelvis of the kidney, so that through the incision that was made, the finger passed into the pelvis, and water injected into this went into the bladder, showing that there was a direct communication from this cavity of pus to the bladder and urethra. The drainage tubes were left in and

* A paper read before the Chicago Medical Society.

† Professor of Surgery, Rush Medical College; attending surgeon to the Presbyterian Hospital, Chicago.

the patient improved promptly, losing the fever and symptoms of pus accumulation and retention. For two weeks the improvement continued, then it was noticed that she began to fail rather rapidly and to show signs of fever again; there were signs of septic accumulation, and the tumor began to increase in size, so that from diminishing, perhaps half the size when first examined, it increased one third. As she was failing and the diagnosis was as complete as it was possible to make it, it was decided to perform nephrectomy.

There are some points of importance in the case: The drainage tube that went into the pelvis of the kidney gave free exit to quite a quantity of urine. I think that most of the secretion from that kidney came through the drainage tube; it was sufficient to wet thoroughly in two or three hours a large dressing; this dressing was sufficient to keep the discharge from the wound pure, so that there was nowhere decomposition of pus so far as the outward manifestations were concerned. It struck me that if this drainage tube from the diseased kidney gave exit to such an amount of urine, and at the same time there was a good flow of urine from the bladder, it was a fair indication that the other kidney was not diseased, and that success would attend the removal of the diseased kidney, and it was decided to do the operation.

Sixteen days ago the operation was done. The patient was prepared in a certain way that I have followed in reference to all patients upon whom I do what is considered a serious operation, and I think it has a beneficial influence in preventing shock. Two or three hours before the operation is performed the patient is given gr. v. to x of quinine, and gr. $\frac{1}{4}$ of morphine. This medicine was administered to the patient of whom I am speaking, and the operation for the removal of the kidney was performed. The whole proceeding from beginning to end occupied an hour, and she went to bed without any manifestation of shock, and with a pulse of 112. She had no rise of temperature until the second day, and then it rose to a 100°; subsequent to that it fell to normal and did not rise above normal until the twelfth day, when other symptoms appeared. During all this time the wound was absolutely aseptic. It healed promptly by first intention, so that on the seventh day all stitches were removed; the wound was solid from one end to the other.

There are some points about this operation to which I desire to call your attention, and I will pass the specimen around to show the nature of the trouble. You will see at the lower end a cavity, which was found to contain six or eight ounces of pus; there is another cavity in the interior of the kidney, the pelvis is entirely destroyed and filled up with adventitious material.

Here was an operation to be done upon a moderately-sized woman for the removal of a tumor containing pus, a tumor which reached up under the ribs, down to the crest of the ilium, and forward to the anterior spinous process. There was a tumor containing pus in which large pockets had formed—what was the best way to remove it? There is no question in my mind that the best operation, in general, for the removal of the kidneys is the posterior operation. However, there are many diseases for which this operation is done where it is impossible to do it in another way than by the anterior operation, such as cases of cystic degeneration where the tumor is so large that it cannot be extruded posteriorly. But here was a tumor of moderate size, containing pus, in which it was desired above all things to avoid getting into the peritoneal cavity, a tumor which had sacs, the walls of which were in moderate degrees of thickness and strength, but could easily be broken open on pressure.

Therefore, the day before the operation I took a cadaver and experimented upon the lines of incision which would best expose this tumor and give exit to it. I finally decided upon the incisions represented in Figure 1. This represents the patient lying upon the opposite side from the diseased kidney. In these experiments I found that by a certain incision I could get the amplest room without doing injury to the colon, the peritoneum or other contents of the abdominal cavity; certainly no more likely than an operation for the exposure of any of the large blood-vessels of the abdomen.

It is hardly necessary for me to state that there is some little difference between the subserous tissue in the lower portion of the abdomen and that of the upper. In the lower portion it is very loose and easily separated, whereas at the upper portion it is quite thin and the peritoneum is more apt to be torn, hence more care should be used in an operation in this position. The commencement of the incision is supposed to be two inches above the superior spine of the ilium, from whence it extends obliquely upwards to the tip of the last rib. The incision is carried through all the tissues, down to the fascia transversalis, everything is carried forward out of the way, and with the finger the dissection can be made, well behind the tumor; all the parts are separated, then a straight incision is made through all of them, straight back from the first incision and half way between the crest of the ilium and the last rib. The introduction of a ligature at the point of the posterior flaps, and pulling aside, gives a wound one can get both hands into, and by exposing the kidney in all its parts, reach the tissues which one wishes to have under control, without difficulty. Figure 2. In this case as soon as the incision was made the tumor presented itself, the finger could be carried around

it in all directions, so that the kidney with its blood-vessels, ureter, and all were well exposed to view.

I desired to adopt the plan, which is a good one to adopt in all tumors that are difficult to reach, of diminishing the size of the tumor, and attempted to divide it in halves by the cautery, but after a few strokes of the knife I approached a pocket of pus, and gave that up for fear of infecting the wound. I had very little difficulty by taking an eyed probe, threaded by a stout double ligature, in passing the probe through the centre of the pedicle, and then with the double ligature ligating it in halves. The ligatures controlled the circulation perfectly. The vessels in the exposed stump were picked up and ligated one by one as a special security. Drainage was perfect, and the anterior wall of the peritoneum fell easily into place and united by primary intention. At the end of a week there was nothing left of this large cavity but the track of the drainage tube.

FIG. 1.

FIG. 2.

This case is an important illustration, it seems to me, of the safety of the posterior incision for tumors of considerable size, where the line of incision is carried out, somewhat in the way here indicated. The saddest part of my report is to come. Four days ago this patient was taken with symptoms of cerebral trouble and suppression of urine, and she died with all the symptoms of uræmia this afternoon at 1 o'clock, sixteen days after the operation. As yet a satisfactory examination has not been made to determine the condition of the opposite kidney, neither has there been a satisfactory microscopic examination of the tumor. Several sections have been submitted to examination, but none have shown the bacillus tuberculosis.

The post-mortem examination showed a highly congested and swollen organ in the remaining kidney, and the capillary vessels were ruptured in many places.

DISCUSSION.

DR. D. T. NELSON: I was very much pleased at the doctor's instructions in regard to preparing the patient for these serious operations, and I believe we have considerable to learn in that direction as yet. The method proposed I believe to be valuable in preventing shock. If it is not wandering in the field that does not apply to the paper I would like to throw out another hint, which is that we prepare the alimentary canal previous to these operations; if you choose, make it antiseptic or aseptic by emptying it and subsequently giving antiseptic drugs, preferably naphthalin in 5-grain doses three times a day. I would like to ask DR. PARKES if, in making the incision, he was careful to preserve the capsule of the kidney and use that in facilitating his drainage? I have had but one case of removal of a carcinomatous kidney. I removed that from the anterior region, not knowing what I was going after. I hoped I had a cyst of the liver of a hydatid form, but on reaching it I found it was the kidney. I opened the capsule of the kidney and preserved that, and after the kidney was enucleated, which was done much more easily than I supposed it would be, I had no difficulty in closing the vessels in the manner the doctor described. After ligating the pedicle it was dropped into the bottom of the capsule and the walls of the capsule fastened to the wound, and drainage-tubes inserted so that there could be no communication with the peritoneal cavity proper. The result of the operation was very satisfactory and there was a rapid recovery, although signs of the recurrence of the disease are appearing in other tissues.

DR. D. W. GRAHAM congratulated DR. PARKES on his discovery of how best to reach the kidney and secure the pedicle. He was surprised when he witnessed the operation to see how accessible all the parts were.

DR. W. T. BELFIELD: The fatal issue of this case through uræmia emphasizes again the necessity for ascertaining the integrity of the opposite kidney before removing the one under suspicion. This precaution is especially needful in cases of renal tuberculosis, since the second kidney is so often the unexpected subject of this insidious disease. In women the urine from the opposite kidney can be isolated by catheterizing its ureter either through the urethra or—if that fails—through a small incision through the vesico-vaginal septum,

whereby the orifices of the ureters are rendered accessible. If the urine be thus obtained previous to the operation, and be found normal in quantity and quality, the surgeon can be reasonably confident that nephrectomy will involve no danger of uræmia at least; while, if this precaution be neglected, the greatest care and skill may be vitiated by uræmia through unsuspected disease of the remaining kidney.

It is questionable whether for nephrectomy, or, indeed, all operations upon the kidney, chloroform is not preferable as an anæsthetic to ether. The decided renal irritation caused by the latter may possibly be a considerable factor in provoking uræmia in such cases, where the second kidney is suddenly taxed with an extra burden.

DR. PARKES, in closing the discussion, said: The old incision recommended for exposure of the kidney is an incision made parallel with the last rib, one-half or three-fourths of an inch away, a safe distance away, to enable the surgeon to avoid entering the pleural cavity. With this incision is always had a great deal of difficulty in exposing and uncovering the kidney and getting at the blood-vessels. One operator relates that he proceeded all right until he divided the upper half of the pedicle, then the patient bled to death. You can see that the incision here recommended exposes everything to view. If you will experiment on a dead body, with a healthy kidney—trying first the old incision and then this one, you will be convinced of the latter's worth. I am convinced of another thing, that it is a good plan in all cases of pus degeneration of the kidney to open the cavities one after the other, if necessary, for the purpose of diminishing the size of the tumor and also for the purpose of diminishing the congestion around the kidney. The great amount of hæmorrhage that occurs in this operation is from the enucleation of the kidney, and with a small incision it is very difficult to control the bleeding points. I think a great point is gained in every operation by having the work under your fingers.

In reference to DR. NELSON'S question as to whether I cut down on the capsule, I am not positive whether I did or not. I pursued the course which I follow in removing all tumors: to cut down on the tumor and to get as close to it and as far away from the dangerous points as possible. I kept close to the surface of the kidney and away from the peritoneum.

I do not know what would have been gained by DR. BELFIELD'S suggestion. This patient was secreting urine from the other kidney into the bladder, it was emptied out through the ureter and could be collected and examined just as well as if the ureter had been catheterized. In the first 24 hours the patient passed 7 ounces of urine from the bladder, in the next 24 hours 10 ounces, and so on up to the time of the occurrence of the unfortunate symptoms to which I have referred. The largest amount passed was 17.3 ounces in 24 hours. Up to that time there was nothing in the appearance of the patient that would make one think she was not going to recover. All at once the change and the end came.

Correspondence.

BELLADONNA FOR HÆMORRHOIDS.

Your issue of Dec. 10th well illustrates that medical thought and practice run in grooves to a considerable extent. For a month past I have been specially studying the etiology of hemorrhoids, and in your journal of the 10th ult. I find three other physicians widely separated discussing the disease, or rather its treatment, and, as usual, adopting widely different methods.

I have still another that I have never known to be used, but likely the ancients employed it; if so I simply wish to revive it. My remedy is belladonna, and I was the patient. I have been a somewhat frequent sufferer from the disease since my army service, but heretofore have been able to relieve it by the ordinary treatment—astringents, etc.

This attack, however, was very severe from the start, and the most excruciating pain, caused by the spasmodic contractions of the sphincter, for 48 hours, at intervals of not more than two minutes. The external tumor was about one inch in length by half that in width and depth, with several internal tumors of small size. Internally I used a suppository of mutton suet and the German tincture belladonna (I had no extracts at hand, as for this purpose they would be preferred). Externally I applied the belladonna and simple cerate. In thirty minutes the spasms were relieved and in twenty-four hours but a trace of the external tumor remained and the internal ones gone entirely so far as I could tell by a self examination.

I have used this remedy in mammary and other painful abscesses with such prompt relief in their initial stages that, reasoning *a priori*, I concluded that it would certainly give some relief to the spasmodic pain I was experiencing, and probably relax the tense, hot tumor, and it did. Try it.

Our physicians in this section, have recognized a typho-malarial fever for twenty years at least. The nomenclature has been adopted for that length of time, and its etiology not a question of dispute, so far as as I know, in a somewhat extended country practice, and ac-

quaintance with surrounding physicians. It seems to us late in the day to question its name or general causation. Numerous authors have substantially adopted it, and it is certainly questionable hair-splitting to dispute its nomenclature now, as it is certainly more euphonious than any other I have seen mentioned.

"Old men are garrulous," and were it not a confession of age I would like to mention several articles in late numbers of THE AGE. I must say, however, that in its general conclusions I indorse the article of DR. J. V. STEVENS in Nov. 10. A long experience has satisfied me that you can neither raise the standard of physicians nor improve their condition by law. Well attended county medical societies governed strictly by medical ethics, will do more to raise the standard of practice and compensation than all the statutes you can put on the books. The fact is the medical colleges are turning out more M. D.'s than the country can assimilate, and we have too many so-called medical colleges.

A. G. CHASE, M. D.

MILLWOOD, KANSAS.

THE MEDICAL AND SURGICAL HISTORY OF THE WAR OF THE REBELLION.

Desirous of obtaining a copy of the Medical and Surgical History of the Rebellion, I addressed a letter to the Surgeon-General U. S. Army asking for a copy, and I was informed that the supply is entirely exhausted. Believing that a more generous distribution of this excellent work among the physicians and surgeons of our country would furnish much valuable information which the profession would be very grateful to receive, and which would contribute much towards the advancement of the science of medicine and surgery, I take the liberty to ask the medical profession to join in an effort to secure a reprint of this work, which will require a special act of Congress.

I am informed by the Surgeon-General that the stereotype plates are still in existence, but that it would be necessary to reproduce the colored plates.

These matters have been fully explained to the committees on printing of the last two Congresses, but so far no action has been taken, probably because Congress is not fully aware of the fact that there is such a great demand for another edition of this work. I would beg leave to request each member of the profession who reads this article to write to the representative in Congress from his district asking him to favor such a bill as will provide for the reprinting of another edition of the Medical and Surgical History of the War of the Rebellion.

Now, if any one has plans better than the one I have suggested, let his voice be heard.

If exchanges feel interested in this matter let them publish their views.

C. M. FULTON, M. D.

DAWSON, D. T.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., JAN. 25, 1887.

Editorial.

MEDICAL READING AND MEDICAL SOCIETIES.

The winter months, especially in our northern latitudes, are the season fitted for the recuperation of the professional mind, and for preparing it against the exhaustion and fatigue to which it is subjected during the remainder of the year. The bracing influence of the weather, the long evenings, and the comparative lightness of practice, combine to stimulate mental action, and to lead to systematic study and introspection. The progressive physician reads sufficiently at all seasons to keep himself up with the times, in the matter of everything bearing on his calling (that is, he neglects not the regular perusal of a sufficient number of first-class periodicals). But this, essential as it is, is not enough. Memory is notoriously treacherous, and breaches therein are very prone to occur. A celebrated surgeon, recently deceased, informed us on one occasion that it had been his regular practice for twenty years, to read Gray's Anatomy through and dissect a cadaver each winter. He found this review of the fundamentals of his specialty so profitable, and so necessary, also, as a course of mental exercise, that to neglect it would, he felt, be an injustice to his patients. If such review be necessary in the case of the specialist, how much more essential must it be to the general practitioner, whose field is so much more extensive and varied. Individual experience and observation are essential in themselves, but without the foundation laid in a thorough acquaintance with the exact divisions of medicine and the recorded experiences of others, they fail of their full value.

Of the means best adapted to the strengthening the practitioner's mind and to storing it with the knowledge which shall yield him the best pecuniary returns, it would be a difficult matter to decide whether a systematic course of reading or active participation in the proper kind of medical society work, is the more effective. The winter months are especially adapted to each, and, indeed, they should be taken

advantage of synchronously. With too many the study of the text-books is practically regarded as a waste of time, after they have entered into possession of their diplomas. Having entered upon active practice, "practical" or clinical articles are alone considered valuable as aides. This is a serious mistake, as the practitioner who will devote but a single hour each day to downright study of the non-practical divisions of medicine will be prepared to concede. But we do not propose to dilate on this branch of the subject now. We wish to offer a few words on the subject of

Medical Societies. As we have already intimated the winter is the season for the medical society. While hot weather and increased demands on the practitioner's time may, through a little stretch of courtesy, be accepted as legitimate excuses for a lack of quorum during the summer months, there is no valid excuse for non-attendance on the winter meetings. But there are societies and societies, and there is no better field for the work of the active reformer than in your average medical society. As we have attended some of the meetings of such, we have been surprised at the number of members in attendance. Nothing but the strong sense of stern duty which guarantees the quorum of "two or three" at the average prayer meeting, can account for an attendance at all.

When the "remarks" do not consist of the utterance of vapid inanities *ad nauseam*, the evening is taken up with the presentation of eyes which ophthalmologists have enucleated, tumors which gynæcologists have removed, arms and legs which surgeons have amputated, fragments of stones which the genito-urinary men have crushed, or instruments to which some of the other specialists have attached their names, so that they (the names) be carried beyond the confines of their own bailiwicks. The average medical society, in cities at least, seems to be run chiefly for the glorification of the specialist, and the chief function of the general practitioner is to furnish the "filling" for the specialist frame-work. We have been amused to see your specialist's air of superiority, as he passes to the underlings who sit disposed in regular rows around the room, the eye, for instance, which his peculiar skill has enabled him to enucleate. Your common every-day general practitioner whose skill and knowledge of the body as a whole, may in numerous instances have prevented eyes from reaching the "ophthalmologist,' has not a word to say during the specialist's theatrical display (your specialist is nothing if not theatrical) but is expected to furnish the applause. Instead of taking back seats, where they properly belong, in the medical society, the specialists force themselves up into the amen corner, and the general practitioner gets in his say only after the '-ists have exhausted themselves.

The winter evening medical society meeting will never be what it is intended to be until it has been made a meeting of general practitioners, into which the specialist is admitted as a guest, and not as the individual who runs the house. The members, too, must come prepared to contribute something more than the usual superficial platitudes. When the subject for discussion is announced for the next meeting each member should take it with him, and should ransack the store-houses of his memory for cases from his own experience with which to "point a moral or adorn a tale" in connection with it. Failing to furnish anything instructive from this source, he should be prepared, through careful reading, with what the best authorities have to say on the subject, in order that he may be able to intelligently discuss points raised in the paper or by the other speakers.

It is much more important that the general practitioner should know all that is known of the disturbances due to teething, for instance, than that he should be instructed regarding the peculiarities of an ovarian tumor, exhibited in a wash tub, from which the specialist of the society may have removed some unfortunate woman. It is by no means necessary to the success of the meeting that the chairman should have displayed before him on his table an assortment of amputated limbs, enucleated eyes, removed tumors and crushed and solid stones. The scientific value of these thing is, moreover, usually absolutely nil, since the most that is done with them is to exhibit them macroscopically—not a word being said of the microscopic structure.

We have, at different times, been requested by medical societies run on the impromptu plan, to publish their proceedings in the columns of the AGE. While the proceedings of a properly conducted society are among the best material which an editor can give his readers, from those of the average impromptu society meeting, good Lord deliver us. Garrulity may be tolerable as it comes from the mouth, but when it comes in cold black and white, it is more than a long-suffering editor should be called upon to endure. When a society composed of broad-minded general practioners, who when they have nothing to say will keep their mouths rigidly closed, shall solicit space in our pages for its proceedings it will be freely granted. Nay more, when we shall learn of the existence of such a society we shall importune it to let us have its proceedings.

THERAPEUTICS AND MEDICAL SOCIETIES.

In his preface to a volume recently issued on therapeutics and materia medica, the author

takes occasion to say: "The thought, expectation or feeling is encouraged, that we are on the eve of a great and rapid forward movement in therapeutic science, and the discovery of each new drug is hailed as a sign that it has commenced and is filling one of the few remaining gaps in the line which is to sweep disease and death from the earth." The inference is that this "thought, expectation or feeling" is baseless, and the tenor of the book throughout sustains the assumption. While, doubtless, the hopes in certain quarters are too sanguine, we believe that skepticism expressed by those whose utterances receive weight from the position, as authors and teachers, of those who indulge in them, has a blighting influence on progress in that branch of medicine to which all other branches are tributary, viz., therapeutics. The foundation of therapeutics is, of course, properly laid in the so-called exact divisions of medicine, but of what avail is the most perfect foundation except as a means to an end? The foundation of therapeutics is now a very substantial affair, and it is high time that the enthusiasm, patient effort and intelligent direction displayed in its laying, be turned towards the improvement and elaboration of the superstructure—an affair which, it must be conceded, is still very imperfect. How shall this improvement and elaboration be best accomplished? The answer is, through coöperative effort, or, in other words, through the systematic effort of the medical society.

The secondary position to which therapeutics is assigned in our medical societies is very much to be regretted. The nature and properties of drugs have been carefully investigated by pharmacists and experimental physiologists, but our literature is singularly barren of contributions on their actions. The mission of society effort, as proclaimed by SIR THOMAS WATSON, "to bring up the therapeutical department of medicine to a nearer level with those other parts which are stricly ministerial and subservient to it," is not yet realized To fulfill this mission is the highest object of all medical study, investigation and experiment. Every medical society should have a Committee on Therapeutics, whose special duty it should be to investigate the action and uses of drugs, and to determine the preparations secured. The reports of such committee would form the texts for discussions which, if properly prepared for, would be of inestimable value to the general practitioner. The systematic study of drugs thus conducted would, moreover, we believe, awaken an interest in society meetings, which the presentation of tumors and amputated members fails to elicit.

About all that has been done in this direction, of late years at least, has been at the instigation of the manufacturing pharmacist, whose laudable efforts have done much, and have given a guarantee of what might be accomplished through the systematic plan which we have indicated.

CATARRHAL JAUNDICE TREATED BY COLD WATER ENEMATA.

"Biliousness" is one of the most common of the minor but nevertheless disagreeable ills. The views of the pathology of the affection have been very different, and the remedies which have from time to time been recommended have corresponded in variety, although there has always been unanimity in referring the disturbance to the liver. Doubtless, an excess of glycogen in that organ, due to an excessive indulgence in food, associated with a deficient amount of bodily exercise, is frequently the cause of the indefinite condition known as "biliousness," but a catarrhal condition of the gall-ducts is, probably, the most frequent cause. When this condition obtains, relief has latterly been claimed to quickly follow cold-water enemata, of a temperature of 59° F. The treatment was first introduced by KRULL, ten years ago, but has until recently not been much employed. In the Revue de Medicine, DR. A. CHAUFFARD commends it highly.

He states that the large injections are well borne, and are generally retained for five or ten minutes; they produce only slight colicky pain, and after the stool has been passed the patient feels considerably relieved. Improvement beginning almost at once; pruritus and yellow vision disappear with great rapidity; the fæces resume their natural color, and the bile pigments disappear from the urine in from two to eight days. The mode of action of this method of treatment is not very clearly made out, but it seems to be proved that one effect is to cause forcible contractions of the gall-bladder. The bile is secreted under very low pressure, and as the experiments with toluylendiamine have shown, deep jaundice may be produced if the bile becomes concentrated and thicker than usual. It is quite possible, therefore, that active contraction of the gall-bladder might overcome the slight obstacle at the aperture of the ductus choledochus; such an effect would be, doubtless, favored by increased peristalsis of the duodenum.

IS LEPROSY CONTAGIOUS?

The imposition of a fine on DR. VAN HARLINGEN, of Philadelphia, for his wilful neglect to isolate two cases of leprosy which came under his charge, and the fact that his fine was paid by contributions from a number of his fellow practitioners, would seem to argue that there is not a unanimity of opinion on the subject of the contagiousness of leprosy. The dis-

ease is, probably, the most to be feared of any of the ills to which human flesh is liable, and is hopelessly incurable. If, therefore, there is any reasonable doubt of its non-contagiousness society should be given the benefit of that doubt. It is not enough to warrant the victim in being permitted to run at large, to say that there is not unanimity of opinion among medical men as to the contagiousness of leprosy, and while feeling the usual professional sympathy for the Philadelphia brother, we cannot but endorse the verdict of the court which mulcted him in a fine. The evidence, moreover, which has been collected in support of the contagiousness of the disease is so positive and so voluminous as to carry with it conviction to minds not prejudiced. It is not enough to argue that persons who have been in close contact with a leper have escaped unscathed. The occurrence of a single case after such exposure must outweigh volumes of this negative testimoney. The spread of the disease in the Sandwich Islands is so rapid as to eliminate all other means than contagion. A few years ago not a case existed on the Islands, and to-day there are 800 inmates in the asylum so widely known through the devotion of Father Damien, who himself fell a victim to the disease. Our authorities cannot afford to take any risk in this matter.

Notes.

DR. WARD, in the last issue of the AGE, in calling attention, in his own inimitable way, to the nonsense of which theoretical antisepticists are guilty, mentioned incidentally the dangers which lurk in the hands of the average accoucheur. The dangers from this source, which he rather ridiculed, are, however, believed to be a living reality in the land of the setting sun, if the Pacific Medical and Surgical Journal is correct in its observations of the profession of San Francisco: "Look only," it says, "at the hands of some of the physicians of this city. What woman would like to have one of them introduced into her vagina? See the finger ends and the nails, swollen and dirty, and if she is educated in the modern bacterial physiology, she will understand that under the finger-nails may lurk the streptococci or bacilli which will inoculate her with a disease that will insure the doctor many visits and consequent fees. The hands, feet, and facial expression mark the man of gentle birth, externally. The tender sympathy, the gentle touch, the instantly conveyed magnetism, that does not shock the most sensitive fibre of the female economy, but yet gives the assurance of perfect *rapport* with her trouble, mental and physical, and which opens the way to a perfect understanding of her needs and sufferings, shows to her the workings of the man's consciousness. Who shall dare enter into the temple of a woman's soul, but a man with 'clean hands, and a pure heart?' How few graduates of our medical colleges can stand in those 'holy places?'"

The death of DR. WESLEY M. CARPENTER, of the N. Y. Medical Record, occurred on the 7th inst. He retired on the previous evening in his usual health, which was never robust, and was found a corpse in the morning. DR. CARPENTER was very widely known throughout the country. His duties on the Record staff being reportorial (he being an accomplished stenographer), he was usually in attendance at all important medical gatherings. He was an indefatigable worker and had a peculiar faculty of grasping the salient points of a discussion. His report of the late International Medical Congress will stand as a monument to his ability in his special line. DR. CARPENTER was born at Erieville, N. Y., in 1839. He commenced his study of medicine at the University of Michigan, and was graduated from the College of Physicians and Surgeons of New York in 1863. He was personally an exceedingly affable and broad-minded gentleman, and his loss will be felt by those who, like ourself, were in the habit of enjoying his society at the annual meetings of the American Medical Association. An autopsy revealed the cause of his death to be a diseased kidney.

An English judge is said to have laid down from the bench, as recently as the year 1882, the following classification of liars: 1, liars; 2, great liars; 3, scientific witnesses. Apropos of this piece of sagacity we notice in the Medical and Surgical Reporter, a reference to a suit for damages, on trial in New York. The medical expert for the plaintiff testified that the woman, who had previous to the accident been unusually strong and hardy, suffered from concussion of the spine, and that it was only a question of time when she would die of her injuries. The expert for the defence testified that the woman had no disease, that her spine was in its normal condition, and that the only trouble was hysteria. Inasmuch as she fell forward, he held, it was impossible for concussion of the spine to occur.

The gratifying intelligence is now wired beneath the ocean bed that the Crown Prince, "Unser Fritz," the sly dog, is improving and that there is now no reasonable question of his recovery. It seems that DR. HOWELL, SIR MORELL MACKENZIE'S assistant, who has been in constant attendance on his royal nibs, took it upon himself (audacious scoundrel that he be), "unbeknownst" to MACKENZIE and VIR-

CHOW, and the rest of them, to give Fritz a course of mercury. The success of the treatment would seem to prove that "the trail of the serpent is over them all." Probably had the blood been less blue it would have been saturated with antisyphilitic remedies long ere this.

The London Lancet has an abstract from an article by a DR. LOUATRE, of New Orleans, in which the virtues of olive oil in large doses, as a remedy for gall-stones are extolled. In his own case six stones, each of which was as large as an olive, were passed. The ridiculousness of such claims for olive oil has already been exposed in these columns, and we are surprised that the Lancet should have deemed the article of sufficient importance to thus seriously give an abstract of it. The more olive oil one drinks the more "gall-stones" will he pass. An analysis of them will, however, show them to be solidified constituents of the oil.

The son of a well-known Louisville physician recently removed to California, where he has engaged in the tombstone business. He has written his father regarding his prospects, stating that there are but four physicians in the place. He thinks there is a splendid opening for the old man. He is, however, apparently slightly selfish in his desire to have his paternal ancestor near him, for he closes his letter with the following sentiment: "I know that with you nearer me I would be more encouraged in my efforts to build up a paying business."

The qualifications of the Medicine Man of the Indians, at Bay Center, in Oregon, are such as the recent graduate of the most exacting Eastern school would find it difficult to conform to. The competitive examination to fill a vacancy in the position was, at last reports, under full way. It lasts one week, during which time the candidate must dance continuously, night and day, and in addition must discover some object which has been previously hidden. Several of the candidates had at the date of the report been obliged to retire from exhaustion.

The long felt want of our friend from Erin, whose chief objection to dying lies in the danger of being buried alive, has at last been supplied. It is in the shape of a safety coffin, which is provided with a valve by means of which fresh air is admitted in quantity to sustain life, and with an attachment which on the slightest movement of the supposed corpse, sets off an electric alarm. The invention is that of an ingenious German.

DR. NEKLEWITSCH, of Loske, Poland, has just lately died. He was one hundred and nine years of age, and just a quarter of an hour before his death he saw and prescribed for a patient. For sixteen years he had suffered from hemiplegia, and was obliged to confine his professional services to the consultation room.

The wounded burglar to whom we referred in our last as being protected from the authorities through the refusal of his medical attendant to reveal his whereabouts, has since died in the Cook County Hospital, Chicago. He left his hiding place here sooner than his condition warranted. The policeman's bullet hit him in the groin, and he died of septicæmia.

Physician, to anxious wife: "We have held a consultation over your husband's case, madam; he is a very sick man, and it might be well to send for a minister, I think." Anxious wife: "Will one be enough, doctor, or would you advise a consultation of ministers?"

A lawyer with a severe cold consulted his doctor. In a hoarse whisper he said his cold was so bad he couldn't speak the truth. The doctor congratulated him on the fact that his ailment would not interfere with his business.

"O mother, what do you think?" exclaimed the sweet high-school girl. "Our minister has just got an amanuensis." "You don't tell me," replied the astonished old lady. "Is he a doctorin' for it?"

We are informed by the Indiana Medical Journal that there is no law in its State to compel a physician to attend a medical society. The overcrowded condition of the profession there is now satisfactorily accounted for.

Texas Siftings calls attention to a remarkable peculiarity in the anatomy of the common dog. Its lungs are the seat of its pants.

Book Notices.

TEXT-BOOK OF THERAPEUTICS AND MATERIA MEDICA, intended for the Use of Students and Practitioners. By Robert T. Edes, A. B., M. D., Fellow of the Massachusetts Medical Society, of the American Academy of Arts and Sciences; Member of the Medical Association of the District of Columbia; Professor of Materia Medica, and Jackson Professor of Clinical Medicine in Harvard University; one of the visiting physicians to the Boston City Hospital.

Philadelphia: Lea Brothers & Co.
Detroit: John MacFarlane.

In these times of activity in the issue of books the *raison d'être* should clearly appear in order to entitle a new work to consideration. The causes which present as justifying an addition to the literature of any special subject are, of course, to a degree at least, satisfactory or otherwise according to what constitutes the justification in different minds. With our con-

ception of what is due the profession in the way of contributions to the literature of materia medica and therapeutics, the excuse for the publication of the work before us is not apparent.

The author of the book while disclaiming adherence to the doctrine of therapeutic nihilism, has, nevertheless, scarcely enough faith in the efficacy of drugs to warrant the trouble and expense of his committing his views to type. "It is of quite as much importance," he says, "to realize what drugs cannot do as what they can," and as a treatise on what drugs cannot do, the book is a tolerable success. "Tell me your beliefs;" said GOETHE, "I have doubts enough of my own." If DR. EDES had obeyed this injunction the size of his book would have been very much reduced. The instances in which he says with a distinctness which demonstrates his own faith in the statement that a certain drug is beneficial in a certain case, are remarkable for their infrequency. There is too much of the "it may be useful" and "it is said to be useful," in the book, to make it such a work as the student, who finds himself set adrift on the sea of perplexity, which the scientific nihilists have created in these latter days, demands as his guide, philosopher and friend.

The book, moreover, is quite too small to cover with any degree of satisfaction the broad field of therapeutics and materia medica. A book of 500 octavo pages on this subject has no room for any thing except what is positively known, and we have faith enough in therapeutics to believe that there is enough known on it alone, to say nothing of what is known of materia medica, to fill a larger book than this.

There is a marked omission to consider the newer drugs. This is, of course, to be expected in an author holding DR. EDES' views. We look in vain for the author's experience with many of the remedies which have attracted prominent attention of late years. This attention has been sufficient to demand that the author of a new book give to the profession his reasons for repudiating them, if he has found them unworthy of mention. When he does mention one of these drugs, his reference is very unsatisfactory. Of cascara sagrada, for instance, he says "it is milder than the other species, and seems to be growing in favor as a laxative, especially fitted for use in chronic constipation." Only this and nothing more; no mention of the size of the dose even, and nothing regarding the manner in which it should be employed. He has, evidently, regarded it as unworthy of a trial at his hands and feeling obliged, through the reports of its action with which the periodicals have been so full of late years, to say something about it, he says "it *seems* to be growing in favor." Salol "is *said* to cause no gastric disturbance and less ringing in the ears than salicylate of sodium." Damiana "forms the basis of a 'Mormon elder's cordial' from which name the peculiar properties claimed for it, as well as the propriety of its use, *may be inferred.*" Papaya "*has been used* to dissolve diphtheritic membrane." Now the majority of practitioners and even first-year students who have ever heard of these drugs, know more about them than DR. EDES, who has thought them worthy of mention, has seen fit to vouchsafe. They look to the text-books to find out whether what *seems*, *is said*, or *may be inferred* of these drugs is sufficient to warrant them in resorting to them is special cases. It is the duty of an author who asks professional support for his work in these days, to respond to this demand from his own experience in the testing of these drugs. When bread is asked for, it is somewhat disappointing to be given a stone. The book is at best but a compilation, and contains scarcely enough of the author's personality to warrant its publication.

A PRACTICAL TREATISE ON MATERIA MEDICA AND THERAPEUTICS. By Roberts Bartholow, M A , M. D., LL. D., Professor of Materia Medica, General Therapeutics and Hygiene, in the Jefferson Medical College of Philadelphia; Physician to the Philadelphia Hospital and Lecturer on Clinical Medicine in the Same: Fellow of the College of Physicians; Member of the American Philosophical Society, etc. Sixth Edition, Revised and Enlarged.

New York: D. Appleton & Co.
Detroit: John MacFarlane.

The first edition of this work was received by the profession with great favor. There was an air of freshness and positiveness about it in very decided contrast with most of the text books on its subject which were already in the field. It had succeeded in getting out of the rut, and the demand for something of the kind was keen. This first edition appeared in 1876, and we have now, in the eleventh year of the book, the sixth edition before us. This is remarkable success, especially when we take into consideration the activity in book-making which has characterized the past decade. The reasons for this popularity are apparent. DR. BARTHOLOW is a physician of the present day, progressive and energetic, and but little hampered by traditions. While displaying a thorough familiarity with the physiological action of drugs, moreover, he regards any such action as but a guide to therapeutic applications which must be subjected to the crucial test of clinical experience. This combination of the scientific with the empirical is what is demanded in medicine, which is by no means a fixed science.

In the edition before us the necessary additions have been made from the newer drugs to bring the book abreast of the times. It is true a number of drugs which some may have found valuable have been omitted, but such as

have been accorded places have been found by both clinical and physiological tests to be of merit. The task of selecting from the numerous introductions to the materia medica those which are possessed of intrinsic worth, is by no means an easy one, and undue consideration for some and injustice to others are inevitable. The author has, however, shown excellent discrimination. Among the newer drugs and remedies which have been accorded a place we observe the following: Pyrogallic acid, antipyrine, antifebrine, aqua-puncture, carica-papaya, cascara sagrada, convallaria, duboisia, erythroxylon coca, euonymin, grindelia robusta, hypnone, jequirity, kairine, paraldehyde, pilocarpine, etc. That such a number of the newer introductions should receive this recognition is a powerful argument in favor of the activity in the matter of new drugs, which has been so marked of late years. Those mentioned, and many others, have come to stay and their introduction has greatly enriched the means at our disposal for combatting disease.

Rectal and Anal Surgery, with a Description of the Secret Methods of the Itinerants. By Edmund Andrews, M. D, L. L D Professor of Clinical Surgery in the Chicago Medical College, Senior Surgeon to the Mercy Hospital, and E. Wyllys Andrews, A M., M. D., Adjunct Professor of Clinical Surgery in the Chicago Medical College, and Surgeon to Mercy Hospital. With Original Illustrations. Chicago: W. T. Keener, 96 Washington St.

The success attained by certain non-professional specialists in the treatment of hæmorrhoids with their secret remedies, for a time excited considerable curiosity in regard to the methods which they employed. With many, however, it was considered *infra dig.* to inquire into these methods. Such inquiry would, moreover, it was held, be a concession to quackery of which no regular physician should be guilty. Fortunately some were found who were not thus bound down by prejudice, and Dr. Edmund Andrews was one of these. Our older readers will remember his communication to this journal on the subject. He has since prosecuted his investigations and we have in the little book before us a description of the most successful non-professional methods, supplemented by an intelligent consideration which the subject has not heretofore received. The book is eminently practical and commends itself to those who wish to be put in possession of the most advanced methods of treating rectal and anal diseases.

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600 Medical Don'ts; or The Physician's Utility Enhanced. By Fred. C. Valentine, M D., Ex-Surgeon-General Army of Honduras; Member of the Medical Society of the County of New York; of the Medico-Legal Society, etc.
New York: G. W. Dillingham.
Detroit: John MacFarlane.

Two negatives, we were taught in our school days, make an affirmative. This being so, six hundred negatives ought to comprise a vast amount of positive truth. An examination of the little book before us certainly justifies this assumption. The author has shown great ingenuity in his negative presentation of facts. It is a good rule in practice when you don't know what to do, to do nothing. The extension of this rule to the laity (to whom this book is chiefly addressed), must be attended by an avoidance of an inestimable amount of the evil which follows officiousness.

The profession would lose nothing by encouraging the sale of this book among the people, for while it would have a good influence in the way of preventing disease, it teaches the reader to rely on scientific advice for slight ailments instead of resorting to self-treatment.

Therapeutic Brevities.

Mercury Biniodide in Gonorrhœa.—Dr. C. K. Illingworth (Br. Med. Journal—Canada Lancet) has found the following serviceable in gonorrhœa, used as an injection:

℞ Sol. hydrarg. bichloride, ℥ ij.
Sodii iodidi, ʒ ss.
Sol morph. (B. P.), ℥ ss.
Sodii bicarb., ʒ iss.
Zinc sulph., gr. x.
Aquam, ad. ℥ vj.

M. Sig. Inject 3 or 4 times a day, after urinating.

Lithuria.—Dr. J. B. Johnson (Practice) recommends the following in cases of lithuria, and in the uric acid diathesis attended with gouty and rheumatic symptoms:

℞ Liquoris ammoniæ acetatis, ℥ iss.
Sodii phosphatis, ℥ iss.
Acidi salicylici, ʒ iss.
Ferri pyrophosphatis, ℈ ii.
Glycerini, ℥ ii.
Elixiris aurantii, ʒ vj.
Aquam, q. s. ad. ℥ viij.

M. Sig.—A tablespoonful every 3 or 4 hours.

Chronic Cervical Endometritis.—Dr. Clement Godson, of St. Bartholomew's Hospital, finds the application of equal parts of liquor ferri subsulphatis and glycerin successful in chronic endocervicitis. It coagulates the discharge, and thus facilitates its removal. In many cases it also allays the inflammation and permits conception, which was before impossible.

Medical Progress.

THE NEUROTIC DIATHESIS, WITH INDIGESTION AND LITHIASIS.—The subject of indigestion, in combination with the uric acid formation, is one which must possess a high interestt for American physicians, for the excellent reason that they must so constantly encounter it.

It is a malady *par excellence* of town-dwellers. It belongs to the individual of thin flank. The robust, bulky country squire, with his hands and feet deformed and unsightly from gout, has his counterpart in the lean, spare, dyspeptic town-dweller. The type represented by the massive country squire is rare in the United States, where even dwellers in the country are lean, as a rule. Taking old England, which member of the family is it who makes for the town? The neurotic member, who kicks against the monotonous life of the rustic, who chafes under that dependence upon the weather which agriculture entails. Just as the old Puritans of New England were those men who would not indorse the tyranny of Charles I., and who emigrated to face the wilderness and the red men rather than stay longer under his rule. No wonder the descendants of these men are more distinctly neurotic than their English cousins,—the children of those who were content to bide at home. If the neurotic member of the family is the one *par excellence* who chooses a town life, he is, to my mind, not the one who endures the best; *i. e.*, himself, or his descendants. If he personally gets along well enough, his children will manifest the influence of town life upon their physique. They are delicate in childhood; they grow up dyspeptics. Their children, despite all care, succumb to the maladies of childhood. Each generation is more markedly neurotic till it comes to that bundle of nerves with shrunken viscera—the girl whose uterus remains infantile, and who is the last of her family. It is a terrible story—is it a true story? That is the question. I am seriously afraid it is a true story.

Not that the race is growing puny. The modern Scandinavians cannot get their hands into the hilts of the swords of the old Vikings. At the Eglinton tournament nearly every man had to have his ancestor's armor "let out"—(probably this was not the term used by the armorer, but it is the modern equivalent). The measurements of ready-made clothes out in the Western States are enlarged to meet the wants of the stalwart youngsters of to-day. On the other hand, the standard of height for soldiers is falling. There are so many little men about now. Town people are undersized. The slight, active-brained neurotic spurns the country and seeks a congenial life in a town.

This neurotic townsman is usually an energetic, hard-working fellow. Certainly he is such in the United States. An affectionate husband he is, for he is distinctly erotic. He is a kind father, very fond of his bright, slight, quick-witted daughters. He likes to see his sons throw themselves heart and soul into their business. What they have to do they do with a will. This is all very well; but behind that neurotic family group a shadowy spectre can be detected by a quick eye. Nature knows nothing of extenuating circumstances. If a family leads an unnatural life they must pay the penalty. "The expansive energy of steam will slay not only the wicked engineer who has neglected his boiler, but also the innocent children playing on the deck overhead.

> 'Streams will not curb their pride
> The just man not to encomb;
> Nor lightnings go aside
> To leave his virtues room.'

But the food and the earthquake, like the wickedness of men, in so far as the arrangements of society are not yet adequate for curbing it, must be accepted with resignation as part and parcel of the events which the constitution of our universe necessitates" (Fiske's Cosmic Philosophy). It would seem that a man cannot get the inside track of the Almighty. The Creator has laid down certain laws which the created must obey, or accept the consequences. If a man forsakes the country and becomes a dweller in towns, the first step toward the extinction of his race is taken. Without fresh infusions of new blood from the country his progeny degenerates to extinction in the fourth or fifth generation. LUGOL and BOUDIN say the third generation ends the family in Paris. HAYLE WALSH and JAMES CANTLIE have found a pure bred Cockney of the fourth generation a rarity. Personally I only know one, a bright little fellow. CANTLIE defied the Guidlhall authorities to find a pure Cockney of the fifth generation.

The effect of town-life is to degenerate the physique: and neurotic persons are those who feel its effects the soonest and the most severely. At least this is the result of my investigations.

How stands it with the neurotic town-dwelling American when he presents himself in my consulting-room? He is a spare, worn-looking man, complaining of indigestion, acidity, and flatulence. Less commonly he has some skin eruption or other; occasionally he has asthma. He has cold hands and feet. Sometimes he tells that he has observed that he passes more water than he used to do. This evidence of shrinking kidney is accompanied by a large left ventricle, a loud aortic second sound, and a hardening artery—the phenomena of the vaso-renal change (those readers who feel interested in this subject will find it dealt with at length in "Vaso-renal Change *versus* Bright's Disease"). His nails are reedy, and there is a vascular plexus in the conjunctival aspect of the lower eyelids. Commonly the gum is retracted, and the teeth worn down. When asked if there are times when little things put him out, or perturb him out of proportion to their real importance, he replies in the affirmative. Are there sediments in his urine? Yes, pretty constantly. Such is the outline of the dyspeptic of the uric-acid formation, who finds the sipping of hot water to ease the pain in the stomach to which he is subject.

In some, in addition to these phenomena, there are very disagreeable sensations. Those around him say he is "nervous." If they felt what he feels, perhaps they would be "nervous" too. He experiences feelings which throw physical suffering into the background. Last spring my liver was out of order from overwork and east winds, and I then learned enough to

comprehend his tale. The whole troop and array of distemperatures vanished (like a horde of evil spirits at the sign of the cross) as soon an an attack of gout fastened on the right foot. Articular gout is not pleasant, but there are worse things than the gout. These unpleasant feelings, to my mind, are linked with the products of later digestion. From three to four hours after breakfast was their favorite time. They would flee after a loose motion of very offensive character, with ill-smelling flatus, or would gradually pass away on getting into the air (probably the offending matters were thus oxidized away). And this personal experience chimes in with the experiences of others. The time of their oncome links them with later digestion. Skatol and indol! Their stench is not less offensive to the nostril than are they to the brain when circulating in the blood. The effect of a mercurial pill and a seidlitz rivets the bond of their association with the liver, which cannot keep them within the portal circulation, but permits of their escape into the general circulation to exercise their toxic influence upon the brain, the organ of mind.

The overworked man is too commonly an individual of sad experiences, and many a man has committed suicide as the only road of escape from his feelings. LORD BYRON found Epsom salts the best means of raising his spirits when depressed, and to clear out the alimentary canal is good practice in these cases.

So much for the individual himself. How about his progeny? "What is acquired by the father is inherited by the child." So wrote GEORGE COMBE. "The fathers have eaten sour grapes, and the children's teeth are set on edge," says a higher authority. The son is the father accentuated, and, as an affluent dyspeptic, at a comparatively early age makes the round of the watering places of his own country and of Europe. In addition to his father's experience of morbid phenomena he is liable to attacks of very sharp pain in the transverse colon, or the stomach, especially if he has acquired any malarial taint.

But his daughters—the migrainous daughters of hard-working fathers—what sort of womenkind are they? *Petite*, active beings, often birdlike in their walk and movements; quick as lightning; acute, sensitive, highly strung, high-minded and quick-tempered; energetic and industrious; neat in their attire; intolerant of dirt—the sight of a cobweb is agony to them; every sense is highly strung, and, when suffering with migraine, on the stretch, till it is scarcely exaggeration to say that when lying in their bedroom they can hear the cat walking across the kitchen floor. Their complaint is of migraine, "face-ache" or "neuralgia" they call it. A one-sided headache around the eye, with pain in the eye itself, accompanied by sparks or stars, commonly ending in vomiting. They complain of palpitation, and also of an opposite condition of heart-failure, which differs from syncope in that there is no loss of consciousness. The condition is one of intense suffering. They have choking sensations at times, as if they could not get their breath. They complain of indigestion, with acidity and flatulence, while the bowels usually are constipated. They pass water in considerable quantity, especially when excited, and still more decidedly during the attack of migraine. Sometimes they pass water in less quantity, but dense, and highly charged with lithates. They constantly complain of dysmenorrhœa, usually with a scanty loss, but sometimes menorrhagia. Their internal productive organs are imperfectly developed, remaining more or less infantile, while the ovaries are tender. Some are quite sexless, others feebly erotic. Some are incapable of impregnation, while others can become pregnant but abort. Some can bear a feeble, delicate child or two; but, speaking broadly, they are not a fertile folk. Commonly, they have rheumatism somewhere, usually in their shoulders, because they have a habit of putting their arms out from under the bedclothes, and throwing them over their heads. These are the people who cannot swallow a pill.

They are charming patients, always attached to their physicians; never out of some doctor's hands long together. They do not get much good, and rarely when they do is it lasting. It is difficult to diet them; for, though they can take good care of any one else, they seem incapable of taking sufficient care of themselves. Experience teaches them comparatively little. When feeling fairly well they forget the physician's advice and warning. They seem to borrow from themselves to-morrow's energy. They will be the soul of a party one day, ending up with a night at the theatre—the gayest of the gay. Next day is spent in bed, in a darkened room, with a racking headache, the brow contracted with pain, begging to be left alone in their misery—the saddest of the sad. At other times they will awake with a sharp headache, improve as the day goes on, and dine out in the evening with a sense of enjoyment. Their friends and acquaintances cannot make them out, or understand them. They themselves always complain that they cannot do what other people do, and that they are not understood, and not unjustly. They are not as other people. Ardent, enthusiastic, capable of great self-denial, they are a race by themselves. They have played an active part in many modern movements.

Such persons, with highly developed nervous systems and small viscera—including an "insufficient" liver, which reverts to the uric-acid formation—are those who suffer from lithiasis and are dyspeptics. The presence of the uric acid seems to impair the gastric juice, as to its solvent properties. Sometimes the pain is experienced when the stomach is empty, and relieved by food. Here there exists a quantity of acid mucus in the stomach. An emetic gives great relief; squeezing the gastric wall and expelling a quantity of acid matter, DR. C. J. HARE thinks. Hot water, all the better for containing a little potash or phosphate of soda, gives speedy relief. Hepatic stimulants, as ipecacuanha, euonymin, or taraxacum, steadily persisted in, raise the tone of the liver. Chloride of ammonium is often useful. An occasional mercurial pill, followed by a seidlitz powder, produces good results. If the stools are tarry, some podophyllin is indicated. For the lithiasis, lithia is the best uric acid solvent, for these neurotics do not bear potash well. Phosphate of soda is their laxative. Some like Carlsbad salts.

As to food, they are not flesh-eaters. Animal food adds to the lithiasis. The food of the

Patriarchs, "corn and wine and oil," is that best suited to them. The sugar the cook adds to the stewed fruit causes two much acidity with them. Well prepared farinaceous matters are good. Milk puddings made without eggs are good. Cream is excellent. It can be taken with tea and coffee, or soda-water, or as creams—chocolate or other. So is cod liver oil, especially if there co exist some lung mischief. (I would strongly advise all readers of this article to narrowly watch the urine of their phthisical patients of the neurotic diathesis, and see for themselves how far lithates are present in it. Recent observations made at Victoria Park Hospital tell of an old kidney mischief in patients who have died of phthisis. In one case of mine the lung trouble had a history of four months, the interstitial nephritis being much older. In another lung case the constant presence of lithates caused me to pronounce for kidney mischief. Both kidneys were extensively fatty, with adherent capsules. Prout wrote that the presence of lithates in organic disease were of evil omen. And one can readily understand that a system endowed with an "insufficient" liver, revealing its incompetence by falling back to the primitive uric acid formation, and handicapped by old-standing interstitial nephritis, can make but a poor fight when assailed by disease.)

A very curious corroboration of what is written here about the food of these neurotics, at once dyspeptics and lithæmic, is furnished by the fact that while the wild dog is a flesh eater, the highly bred pet dogs of to-day are quickly made ill by animal food. This fact was told me lately by an aristocrat (of the class discussed in this article), and on making inquiries it was found that this fact is well known to dog-fanciers. The collier of the north has the best of meat for his dog, even if he, his wife, and his children go without. But if the well-bred dog of distinguished lineage has meat three days consecutively he is manifestly out of sorts, and commences in the red manage, which it seems is eczema, a skin affection notoriously linked with gout. As the master is so the dog is. The liver evidently is plebeian, and does not get on well with a patrician existence. Severe bodily exertion in the open air alone enables it to carry on urea-formation satisfactorily; or, in other words, flesh-eaters must be of active habits if they wish to avoid the uric-acid formation.

Lithæmic dyspeptics are very difficult persons to manage or treat satisfactorily, whether as regards their medicines or their dietary. Medicines are apt to disagree with them; vegetable tonics are apt to excite the vesical centres; iron upsets their liver; opium acts as an excitant rather than as a sedative. They, as a rule, dislike milk puddings; they love the sapid meat; they hate giving trouble, or having any food specially prepared for them. Anything which absorbs them makes them forget the physician, his council and his warnings. They throw themselves into everything with such abandon as leaves them no thought for anything else. Yet they are highly intelligent persons; and the female neurotic is commonly a very charming little lady. Some rustic neurotics are not petite, but they never are corpulent. George Eliot has a whole series of them in "Adam Bede"—the immortal Mrs. Poyser was one. I am not sure that Mr. Craig, the gardener, was not one too. When Mrs. Poyser was summing up that worthy she concluded, "It was a pity he couldn't be hatched over again, and hatched different." And a pronounced neurotic, well known to me, regrets frequently that Mrs. Poyser's suggestion cannot be carried out.

Civilization it would seem—like everything else in this imperfect world—is not an unalloyed good.—J. MILNER FOTHERGILL, in *Med. Record.*

TREATMENT OF DISEASES OF THE SKIN.—

Epithelioma—Epithelial Cancer.

Take of Oleate of arsenic, 5 to 10 grains.
Chloride of zinc, 5 grains.
Powdered arrow-root, ½ drachm.
Extract of belladonna, 5 grains.
Extract of opium, 10 grains.
Lanolin, ½ ounce.
Mix.

Take of Oleate of arsenic, 5 grains.
Ointment of oleate of mercury, ½ drachm.
Simple ointment, 1 ounce.
Mix.

Take of Sulphate of atropine, 4 grains.
Sulphate of morphine, 4 grains.
Distilled witch-hazel, 2 ounces.
Water, 3 ounces.

Mix. Use on old muslin, and renew application frequently for the relief of pain.

Take of Powdered chlorate of potassium, ½ ounce.
Powdered ergot, ½ ounce.

Mix. Dust over the surface.

Erysipelas.

Take of Subnitrate of bismuth, 1 drachm.
Carbonate of lead, 2 drachms.
Creasote, 3 drops.
Ointment of rose-water, 1 ounce.
Mix.

Take of Acetate of lead, 1 scruple.
Infusion of digitalis, ½ pint.
Mix.

Take of Tincture of chloride of iron, 1 ounce.
Compound tincture of cinchona, ½ ounce.
Glycerin, 1 ounce.
Mix.

Take of Yellow oxide of mercury, 10 grains.
Powdered arrow-root, 1 drachm.
Ointment of oxide of zinc, 1 ounce.
Mix.

Erythema.

Take of Borax, 1 drachm.
Glycerin, 1 ounce.
Rose-water, 2 ounces.
Mix.

Take of Subnitrate of bismuth, 1 drachm.
Carbonate of zinc, 1 drachm.
Ointment of rose-water, 1 ounce.
Mix.

Furunculus—Boil.

Take of Extract of belladonna, ½ drachm.
Extract of arnica, 1 scruple.
Sulphate of morphine, 2 grains.
Lanolin, 1 ounce.
Mix.

Take of Lead plaster, 4 ounces.
Opium plaster; 2 ounces.
Mix.

Take of Extract of hyoscyamus, 1 scruple.
Ointment of nitrate of mercury, 3 drachms.
Oil of spearmint, ½ drachm.
Ointment of oxide of zinc, 1 ounce.
Mix.

Take of Balsam of Peru, 1 drachm.
Iodol, 10 grains.
Oxide of lead, ½ drachm.
Lard, 1 ounce.
Mix.

Herpes.

Take of Sulphate of morphine, 3 grains.
Calamine, ½ ounce.
Subnitrate of bismuth, ½ ounce.
Mix. Dust over the surface.

Herpes Zoster—Shingles.

Take of Hydrochlorate of cocaine, 5 grains.
Fluid extract of belladonna, ½ ounce.
Distilled witch-hazel, 1½ ounces.

Mix. Mop over the surface frequently, and a fine powder can at the same time be dusted on the parts, or collodion can be used in place of the latter.

Hyperidrosis—Increased Secretion of Sweat.

Take of Sulphate of quinine, ½ drachm.
Alcohol, 5 ounces.
Mix.

Take of Naphthol, 1 drachm.
Glycerin, 1½ ounces.
Alcohol, 1½ ounces.
Mix.

Take of Naphthol, 2 drachms.
Tincture of saponin, 2 ounces.
Tincture of witch-hazel, 2 ounces.
Mix.

Take of Permanganate of potassium, 10 grains.
Alcohol, 1 ounce.
Water, 4 ounces.
Mix.

Take of Salicylic acid, ½ ounce.
Powdered oleate of zinc, 2 drachms.

Ichthyosis.

Take of Oil of ergot, 3 ounces.
Lanolin, 1 ounce.
Mix.

Impetigo Contagiosa.

Take of Ammoniated mercury, 10 grains.
Tyhmol, 1 grain.
Carbonate of zinc, 1 drachm.
Prepared lard, 1 ounce.
Mix.

Lupus Erythematosus.

Take of Creasote, 8 drops.

Subnitrate of bismuth, 1 drachm.
Lanolin, 4 drachms.
Ointment of rose-water, 4 drachms.
Mix.

Take of Tincture of green soap, 3 ounces.
Distilled witch-hazel, 2 ounces.

Mix. Sponge over the surface every day or two.

Lupus Vulgaris.

Take of Corrosive sublimate, 5 grains.
Powdered arrow-root, 1 drachm.
Subnitrate of bismuth, 1 drachm.
Ointment of rose-water, 1 ounce.
Mix.

Take of Creasote, 5 drops.
Salicylic acid, 15 grains.
Ointment of oxide of zinc, 1 ounce.
Mix.

J. V. SHOEMAKER, in *Med. Register.*

USTILAGO MAIDIS AS AN OXYTOXIC.—DR. W. A. N. DORLAND, of the Philadelphia Hospital, after a study of ustilago maidis, summarizes as follows:

1. *The toxicology and physiological action of the drug.*—No cases of poisoning in man by the drug are on record. That it is, however, possessed of toxic properties in large doses has been proved by MITCHELL. He found that in the lower animals, in large doses, it acted violently upon the spinal cord, paralyzing first the sensory, later the motor tracts, finally involving the motor and probably also the sensory nerves. Like the ergot, then, it is probable that the chief force of the drug, in toxic doses, is expended upon the nerve centres, producing a toxic paralysis.

The action of ustilago upon the uterus has been more carefully noted. After the ingestion of a sufficient amount, in from twenty minutes to half an hour, the pains, if present,

are increased in severity, in frequency, and in duration, presenting a marked *clonic* character, following each other in frequent succession, with a decided intermission between each. In this respect it differs decidedly from the action of ergot, which in full doses, produces one continuous *tonic* spasm of the uterine muscle. It is this property of ergot which has, when administered before the delivery of the placenta, produced in so many instances the irregular contractions of the uterus, of which the hour-glass is a well-known example. The employment of ustilago seems to be entirely free from such unpleasant complications. In addition to being a valuable adjuvant in stimulating weak uterine contractions, ustilago seems to possess the property, which some years ago was ascribed to quinine, namely of exciting uterine pains when entirely suspended.

As to the time required for the action of the drug to become apparent, it may be said that it differs in different cases, depending, undoubtedly, upon the rapidity with which it is absorbed from the gastro-intestinal tract and carried into the system. In only two instances did it require over thirty-five minutes before the ustilago acted upon the uterine tissues, and in one case most of the drug was ejected by emesis. In the remaining seven cases the average time required was twenty-five minutes.

The effect produced by ustilago upon the other unstriped muscular tissues of the body has not been inquired into. Probably it produces the same increase of intestinal peristalsis and the same rise in the arterial pressure due to vasor motor spasm as is produced by ergot. This is yet open to investigation.

2. *The indications for the employment of the drug.*—We shall consider the first indication for its use to be the failure of the pains, with *complete dilatation of the os uteri.* In none of the cases was the drug employed until the pains of labor had either become so weak that they were inefficient to accomplish the expulsion of the fœtus, or until they were entirely suspended. This, then, we consider the second indication for its use, namely, the *inefficiency or entire suspension of the parturient pain.* After the ustilago had been taken, it may also be noticed that in no case was there the slightest tendency toward a post partum hæmorrhage. In each case, after the expulsion of the placenta, the uterus remained in a state of firm contraction. While, during the three months the great majority of the remaining cases, in which the customary ergot had been employed, showed no tendency whatever toward this alarming accident, however, in two instances was there such an occurrence demanding prompt attention. The third indication, then, for the employment of ustilago we shall consider to be *a condition of uterine inertia threatening or producing post-partum hæmorrhage.*

3. *The dose and mode of administration.*—The preparation of ustilago employed in all reported cases, as well as in our own, was a good fluid extract. The dose of this varies from one-half to two drachms, one drachm being a fair average. This may be repeated at intervals as required. Should it be necessary, it may be used hypodermatically in doses of from five to fifteen minims.

Finally. *The advantages of ustilago over ergot.*—The employment of ustilago seems much to be preferred to that of ergot. It does not produce irregular contractions with all the consequent complications and sequelæ; containing but 2½ per cent. of fixed oil, while ergot contains from 25 per cent. to 28 per cent., the dangers of absorption are reduced to a minimum; and finally, as it can be procured at a cost of 50 per cent. less than that of ergot, it seems to be on a fair highway toward the supplanting of the latter in obstetrical practice, should the results of the investigations thus far be confirmed by subsequent researches.—*Medical News*, Nov. 5, 1887.

TREATMENT OF CYSTITIS IN THE FEMALE.—In an article published in *Journal American Medical Association*, Dec. 24, '87, DR. H. O. MARCY says:

In 1881 I had the honor of contributing a paper upon the treatment of cystitis and, as the result of a long period of experimentation, I then presented a series of double rubber tubes for the injection and irrigation of the bladder. These catheters of various sizes, ranging from No. 18 to 25 F., and the efferent tube is three times longer than the direct, and thus over-distention of the organ is prevented. The double tube was of course no novelty, but they had never been made of *soft* rubber, and many months of experimentation elapsed before the perfection of the tubes. As now made they leave little to be desired and are as perfect in finish as the best of soft catheters. The exquisite finish of the surface and eyelet is secured by curing at high temperature in molds of very hard annealed glass.

The relief sought is not a simple disinfection. For reasons already referred to the cleansing of the bladder is attained with much difficulty and, on this account, the hot douche proves of the greatest service. I have been for years in the habit, in chronic cases of cystitis, of directing the water to be used as hot as comfortable and to be continued for half an hour morning and evening. The result is comparable with the hot water vaginal douche, not only to wash away the mucus and decomposing urine with ferments, but especially to lessen the vascularization of the bladder and aid in the reparation of the epithelial protective layers of cells. A long series of experiments were undertaken to ascertain the antiseptics best suited to be used in the bladder, and the intolerance of germicides in the bladder is most remarkable. Generally a 1 to 5,000 mercuric bichloride solution is followed by severe pain and tenesmus, often lasting for some hours. A 1 to 10,000 solution has been used more often than the weaker solutions, and it is very effective in this strength, but not seldom have I been obliged to suspend its use entirely, or substitute a much weaker solution. Only recently a case has been reported to me where a 1 to 80,000 could not be continued because of the pain. The better way is to cleanse first the bladder with warm water; then use the antiseptic as strong as judged best. After its retention for a few minutes allow it to escape, and follow immediately with the prolonged hot water douche. By so doing, the good result of destruction of ferment is accomplished by the use of a comparatively strong solution, and the deleterious secondary result prevented by lessening the

blood supply, nerve irritation, etc. It is always well to remember that the water should be boiled water, and cooled to the proper temperature. In the city this is ever at hand in the water from the hot faucet, as this has always been carried to a high temperature before reaching the boiler.

KOUMISSED PEPTONES.—DR. ANDERSON, in the British Medical Journal of December 3, 1887, describes this substance which he has prepared, as follows:

It is milk, or milk and other foods; first, by the action of pepsin, of pancreatine, or of both, almost completely digested, and thereby converted into peptone, or still further split up, then made into koumiss. In the process of peptonizing about twenty-five per cent. of water is driven off, and none is previously added. Koumissed peptones are, therefore, of about fifty per cent. greater food value than ordinary koumiss. They are more fluid, have a sediment of far greater impalpability, and are incomparably more digestible and easily assimilable than ordinary koumiss, or even than Russian fermented mare's milk. While the author of this paper claims to be independently a discoverer of ordinary koumiss, he is the acknowledged inventor and institutor of this, the highest expression of a perfect koumiss. It is of especial use in the irritable and adynamic types of wasting diseases; and can be, and has been taken and retained, when all other foods, ordinary koumiss not excepted, have been rejected. Valuable lives have been saved which would have been lost but for its administration.

Hitherto I have spoken of the use of cane sugar in the making of koumiss, etc. I now come to speak of the substitution of honey For years past seldom has cane sugar been used by me. In the preparation of ordinary foods, grape sugar, and sometimes sugar of milk, has replaced cane sugar on the ground of the disagreeable eructative and fermentative action the latter exerts when administered. This cannot be so great in the matter of koumiss; yet I have substituted honey for cane sugar, and principally for the following reasons: Honey is a more wholesome, more nourishing, more digestible, and more physiological food than cane sugar. It produces a koumiss having a finer sedimentary deposit, increases the beauty and delicacy of flavor, and delays or prevents its becoming caseous.

Koumissed peptones are, equally with koumiss, the vehicles for the administration of such of the most important therapeutic agencies as are of use, particularly in wasting diseases. But such medicinal agents are not added where the beauty and delicacy of flavor of either the koumiss or koumissed peptones are in any appreciable degree interfered with.

NAPHTHALIN AND CALOMEL IN TYPHOID FEVER.—There has been a large amount of clinical evidence tending to show that calomel and naphthalin are efficient drugs in typhoid fever, lessening its severity and even at times aborting it. DR. FURBRINGER (Deutsche Med. Wochensch., 1887, Nos. 11 to 13) has been investigating this question both clinically and from a bacteriological stand-point, with results somewhat disappointing to hopeful therapeutists. Naphthalin was first tried in one hundred consecutive cases of typhoid fever. It was given in doses of 3 to 4 grammes daily, according to the Rossbach-Götze formula. Mild baths were also employed, but no other special remedies. DR. FURBRINGER concludes that the drug had no influence in shortening or aborting the disease, or in preventing complications or relapse. Still more positive were his bacteriological studies. He found that the fæces of patients not taking naphthalin contained 112,000 micro-organisms per milligramme, while during the use of naphthalin the number was only reduced to 90,000. Furthermore, the naphthalin did not kill the typhoid bacilli, and these could be cultivated from the stools without any difficulty.

Calomel given in good doses at the beginning of the disease had a striking action upon the temperature, lowering it for some time. FURBRINGER seems to think that this result does not occur in other fevers, and infers that it is in a measure a specific action. There is, however, plenty of evidence to show that calomel does act similarly in other febrile diseases, such, for example, as pneumonia. In the calomel stool the number of micro-organisms is about three fourths that in the ordinary stools, or 81,000 per milligramme.

The typhoid bacilli are not killed, and such action as calomel possesses can be due, therefore, to any antiparasitic process. FURBRINGER thinks that the drug does not possess a certain amount of specific action, but that, practically, the calomel treatment of typhoid fever does not materially influence the course or mortality of the disease.—*N. Y. Medical Record.*

HYDROFLUORIC ACID IN THE TREATMENT OF PHTHISIS.—A commission of inquiry, constituted by the Paris Académie de Médecine to examine two papers on the subject of hydrofluoric acid in the treatment of phthisis by DRS. SEELER and GARCIN, report as follows: In the first place it was shown that dilute solutions of the acid may be handled and administered without inconvenience. In 1:2,000 solutions it is a powerful antiseptic, and ranks in this respect with the biniodide of mercury. The fluoride of ammonium was used in several of the experiments, and being solid it was found easier to manipulate than the pure acid; moreover, a 1-per-cent. solution, when injected hypodermically, does not give rise to the slightest local lesion. The slightest trace effectually destroyed cultivations of the bacillus tuberculosis, and it appeared to possess undoubted power as a bacillicide. It was employed therapeutically in the form of a vapor. One of the earliest effects of this medication was an improvement in the appetite, and in the majority of cases the night-sweats diminished or disappeared. The febrile symptoms subside, and the dyspnœa is promptly relieved. No hæmoptysis ever followed its employment. The expectoration gradually lessens in quantity, and on a microscopical examination the bacilli are soon found to be few or absent. The amelioration in the condition of the lungs is perceptible on auscultation and percussion, and the spirometer confirms the reality of the improvement.

According to Dr. Garcin, of 100 phthisical patients 35 were cured, 41 improved, while 41 remained stationary or died. The cures and improvements were effected in patients affected only in the first or second degree. The report concludes that hydrofluoric acid possesses an incontestable power over the development of pulmonary tuberculosis, and is both easy of application and certain in its effects. This method of treatment does not require constitutional treatment to be dispensed with, and it is essential to secure satisfactory hygienic surroundings for the patient.—*London Medical Record.*

THE TREATMENT OF HEPATIC COLIC BY OLIVE OIL.—Olive oil in large quantity is vaunted as a certain cure for hepatic colic due to gall stones. DR. JUST TOUATRE, of New Orleans, has written an interesting account of self-cure of biliary colic and gall-stones, in the second number of a bi-monthly Roumanian journal (Archives Rovmanies de Médecine et de Chirurgie), whose editor is M. GEORGES ASSAKY. The method of procedure was as follows: At seven in the evening a blue pill of the size of 2½ grains was taken, and this was followed twelve hours later by the taking in one draught of twelve tablespoonfuls of olive oil; a quarter of an hour later a similar dose of olive oil was taken, and then the patient addressed himself to sleep on his right side. At nine o'clock the blue pill acted, producing a copious biliary evacuation, but no gall-stones. Three o'clock in the afternoon saw another bilious stool without stones, but from seven in the evening till midnight six stools were passed; the first two contained seventeen calculi of the size of a large pea of conical shape, grayish-yellow aspect, and soft consistence. Altogether sixty stones were evacuated, and six of these had the volume of an olive, and were of a black color. The passage of these calculi by the cystic and biliary canals was for the most part unattended with pain, a few spasms being felt probably at the time of the movement of the large calculi. An inexpressible relief was obtained from the pains over the liver and shoulder, which had previously caused much distress; the liver also diminished in size. For three months DR. TOUATRE enjoyed perfect health, when the trouble commenced again; the olive oil was repeated in similar fashion, and with the result that eighteen more calculi were discharged by the bowel. Since then he has enjoyed excellent health. He admits that some courage is required to swallow the large doses of olive oil.—*Lancet*, Dec. 10, 1887.

THE TREATMENT OF DIPHTHERIA BY PERCHLORIDE OF IRON AND MILK.—In the Gazette Hebdomadaire, of November 4, 1887, NEKKACH recommends this treatment quite strongly, and, although it is by no means entirely new, it is, perhaps, worthy of notice. By this method he obtained seventeen recoveries out of twenty-two cases of diphtheria involving the larynx and pharynx.

The treatment consists in the administration of from twenty to thirty drops of the liquid perchloride of iron in a glass of pure cold water; or, better still, the patient is to take a large wooden spoonful of this water and iron mixture every few minutes, day and and night. Immediately after the ingestion of the drug, the child is to take a large spoonful of cold milk, not boiled or sweetened. Cataplasms of flaxseed meal are also applied to the neck. In some instances the drug is applied directly to the part affected.

The objects attained are stated to be the prevention of further exudate, the production of a desirable astringent contraction of the tissues, and a tonic influence on the entire body.

NEKKACH believes that by this means a certain curative effect is produced, that asphyxia is prevented, and that the epidemic tendency is actually decreased. The latter is, of course, exceedingly unlikely, except by a very indirect action.—*Med. News.*

THE PHYSIOLOGICAL ACTION OF OIL OF TURPENTINE.—H. A. HARE, M. D., published in Philadelphia Med. News a paper on the physiological action of the oil of turpentine. He thus summarized his conclusions:

1. The oil of turpentine in small doses, resembling those ordinarily given in practical medicine, produces an increase in the number of the cardiac beats, due to a direct stimulant action on the heart.

2. In the larger doses it produces distinct slowing of the pulse, due to a stimulation of the pneumogastric or inhibitory centre.

3. That its influence on the vaso-motor system, if at all, is very slight, either with large or small doses.

4. That poisonous doses (5 c.c. to c.c.) (♏. 80 to 160) produce death by cardiac failure when injected directly into the jugular vein.

5. That the drug in small doses increases reflex action somewhat, but in large doses decreases it, the increased being due to a stimulation of the spinal cord, and the decrease due to depression of the sensory side of the cord and afferent nerves.

JABORANDI AS A REMEDY IN SNAKE BITES.—DR. H. C. YARROW, of Washington, has been experimenting recently with a view to determine the value of certain reputed antidotes to serpent venom. All of them, thus far, in his hands have proved valueless with the exception of the fluid extract of jaborandi, which seems to possess antidotal powers, at least in the case of mammals, but upon fowls it appears to have no such effect. DR. YARROW has given hypodermatically to rabbits four-fold lethal doses of crotalus venom, and then, by the administration of 35 minims of fluid extract of jaborandi, he has prevented any serious results.

The use of jaborandi as an antidote to venom poison was, we believe, first suggested by DR. JOSSO, in the Gazette Hebdomadaire de Médecine et de Chirurgie, Paris, 1882, vol. xix, p. 835, and in this communication he reported a case of viper bite cured with an infusion of the leaves.—*Med. News.*

THE USE OF CORROSIVE SUBLIMATE IN OBSTETRIC PRACTICE.—SZABO in Archiv. Gynecol., says that the use of sublimate is ap-

proved of at the Buda-Pesth Obstetric Clinic, but the following conditions and restrictions have been found useful: 1. For the disinfection of the hands a solution of sublimate of 1 to 1,000 is recommended. 2. For the disinfection of the external genitals a sublimate solution of 1 to 2,000 should be employed. 3. For the disinfecting irrigation of the uterine cavity or the vagina a sublimate solution of 1 to 4,000 is recommended. 4. Irrigation of the vagina, and still more of the uterine cavity, is permissible only when the indication is very positive, either after parturition or during the puerperium. 5. Not more than two quarts of sublimate solution should be used for irrigation of the vagina or the uterine cavity. 6. In atonic hæmorrhages post partum a 1-to-8,000 sublimate solution should be used as a hæmostatic. 7. Sublimate should not be used with women who are suffering from anæmia, phthisis, nephritis, or diseases of the digestive organs.—*N. Y. Med. Jour.*

JABORANDI AS A GALACTOGOGUE.—A Liege contemporary has called attention to the peculiar influence of jaborandi on the lacteal function. So marked is this said to be that spurious specimens of jaborandi are reported to have been detected from the absence of this property. At the same time its effect is only produced to advantage in a certain class of cases, the precise indications for its use not having been as yet ascertained. In the case of a strong woman, weighing over fifteen stone, whose milk secretion had ceased since more than a fortnight, ten drops of the fluid extract of jaborandi given every four hours, secured an immediate return of the secretion. Things went on well for a time, but in the course of a few weeks the patient became subject to hallucinations and fits of violent excitement. The jaborandi was suppressed and the symptoms disappeared—and the milk with it.—*Med. Press and Cir.*, Dec. 7.

ON THE ACTION OF RUSSIAN BATHS ON THE SECRETION OF MILK IN SUCKLING WOMEN.—In an article detailing the results obtained in a series of elaborate experiments published in the London Med. Record KOLESINSKY reaches the following conclusions:

1. Suckling does not present a contra-indication for the use of Russian baths. The latter, therefore, may be freely allowed to the wet-nurse, and even may be recommended to her as an important means for preserving personal cleanliness, and for encouraging a regular action of her skin (provided the woman has no eczema, etc.) 2. The baths may be to a certain degree, regarded as a galactagogue. 3. In a majority of cases the bath increases not only the daily amount of water, but also that of solid constituents of the woman's milk.

PURE TEREBENE IN THE TREATMENT OF THE ADVANCED STAGE OF UTERINE CANCER.—Attention has been called to the value of pure terebene in the treatment of advanced cases of cancer of the uterus. The vagina is first injected with a small quantity of a strong disinfecting solution (permanganate of potash or chlorine water), and washed out with a copious supply of tepid water. Then plugs of cotton wool, saturated with a mixture of equal parts of terebene and olive or almond oil are placed in contact with the ulcerated surfaces, and maintained in apposition with a large plug of wool. This dressing only needs to be removed every second or third day. If care be taken not to make the plugs too voluminous, no inconvenience will be felt from their pressure.—*Med. Press and Circular.*

A GARGLE IN STOMATITIS.—The following formula is an excellent gargle in cases of stomatitis, caries of the teeth, etc.:

℞ Tannin, ʒ ij.
Tinct. of iodine, ℈iv.
Iodide of potassium, ℈j.
Tinct. of myrrh, ℈iv.
Rose water, ʒ viij.

A dessertspoonful in a small glassful of warm water is used to wash the mouth thoroughly every morning.—*American Journal Medical Sciences.*

COCAINE IN PAINFUL MICTURITION OF GONORRHŒA.—Of all the twisting, burning, lancinating pains which afflict mankind, that accompanying the act of micturition during the acute stage of a gonorrhea is perhaps the worst. A great point is gained if in some simple way this excess of pain can be obviated, and an injection of a four per cent. solution of cocaine overcomes the difficulty almost completely. Before micturition, let the patient inject from half a drachm to a drachm, retain it for a few minutes, after which micturition can be accomplished painlessly.—*Med. Review.*

A SIMPLE METHOD OF DISLODGING IMPACTED GALL-STONES.—LAWSON TAIT describes the following simple procedure, which he has used in one case successfully. It consists in passing a fine needle through the wall of the intestine from below (that is, from the empty part of the intestine) into the gall-stone. The stone is thus easily and immediately split up into fragments and passes readily along the intestine, and the grave complication of opening the intestine is rendered unnecessary. The operation is, in fact, little more than an exploratory incision.—*Lancet*, Dec. 10, 1887.

HYPODERMIC INJECTIONS OF CHLORIDE OF SODIUM IN COLLAPSE.—DR. ROSENBUSCH, writing in a Polish journal, describes some cases of collapse from hæmatemesis and hæmoptysis in which hypodermic injections of chloride of sodium acted most satisfactorily.—*London Lancet.*

LEMON JUICE IN EPISTAXIS.—GENUIL has had excellent results in checking epistaxis by first syringing out the nares with cold water and then following this by injecting the nares with lemon juice; the coagulation of the blood followed promptly.—*Bulletin Général de Thérapeutique*, Nov. 30, 1887.

The Medical Age.

Vol. VI. DETROIT, FEB. 10, 1888. No. 3.

Original Articles.

NOTES ON ABDOMINAL SURGERY.*

BY HAL C. WYMAN, M.S., M.D., DETROIT, MICH.†

It occasionally happens in the practice of abdominal surgery that patients die. All do not recover, unfortunately. I make this statement because we have so many reports of successful results, following abdominal section and operations within the peritoneal cavity, that one easily gets the idea that operations of this character are harmless. Some years ago I published a series of fatal cases of laparotomy, and made some endeavor to explain the causes of the fatality. As the number of my operations within the peritoneal cavity has increased, the cases which have resulted fatally have diminished. In other words, I believe that experience and observation and study have contributed to the successful termination of many cases. When I first began operating antisepsis was comparatively unknown, and but very little practiced. LISTER, however, had already begun his teaching upon this subject. The spray, with a somewhat complicated apparatus, was supposed to be essential to antisepsis. The importance of absolute cleanliness was not recognized. I believe the better results of my more recent practice is due to several facts, which I will briefly mention.

First, speed in operating: Taking great pains to have the peritoneal cavity open as short a time as possible, that as little air may enter as possible. When we think of the immense network of veins, and the immense amount of blood which the cavity contains, we see at once the means by which toxic substances may quickly enter the general circulation, there to work mischief. We can also see how the temperature of the blood which circulates in the region, may be lowered to a degree that is incompatible with prompt recovery from wounds and for this reason: Secondly I propose to have the temperature of the room in which the operation is performed high enough to avoid serious chilling of the blood. I like the room heated to about 80 degrees at the time of the operation. Third, taking pains to control every drop of hemorrhage in the peritoneal cavity, and to remove all clots, fragments of tissue, and fluids before the sutures for closing it are tied. Fourth, taking great care to properly diet and nurse the patient immediately before and after the operation. By proper diet I mean the use of simple liquid foods for the first 36 hours after the operation. The food most preferable is corn, or oat-meal gruel in quantities of a teacupful at intervals of three or four hours.

Nursing consists in keeping uppermost in the mind a conviction of recovery and restoration to health; in having the bedding of the patient so arranged that it is easily kept clean, and is soft and comfortable; and maintaining quiet for the first 36 hours.

Case 1. Miss. B., Indian Ave., Detroit, age 22, had suffered from girlhood. She had grown hysterical, and during her menstruation periods she had suffered from epileptic seizures. The attacks of the latter became so frequent that it was plain to see that something more than an administration of drugs must be done for her. The demand for an operation was quite imperative and the abdomen was opened. The ovaries and tubes were removed. The operation was very simple and left the peritoneal cavity perfectly clean, with the exception of the ligatures. Convalescence from the operation was completed on the fourteenth day, and the result of the operation was a decided modification in the frequency and violence of the epileptic seizures. The patient's temper, too, which had been very irascible was much improved, and she became able to do enough to earn her own living.

Case 2.—Miss O., Sherman St., Detroit, had long suffered from dysmenorrhœa. She was very hysterical and declined seriously in health with each menstrual period. She had the most aggravating dyspepsia and vomited or regurgitated her food almost immediately after she ate it. The spasm of stomach and duodenum which followed the taking of solid food into the stomach, could be seen through the abdominal walls, so great was her emaciation. Medicines were of almost no use because they were so quickly regurgitated. When given by suppository they seemed to exert only feeble action because the lower bowel had lost its absorptive power. Constipation was extreme and the fecal mass hard and dry. At times a period of 10 to 15 days would elapse before the bowels could be induced to move. There was, as might be expected, great bodily weakness.

* A paper read before the Wayne County Medical Society.

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She expressed her inability to stand or walk and spent most of her time in bed. Thinking to rouse her to make some physical exertion that might stir the organs of nutrition into action, I took her in my arms and carried her to a rocking chair on the porch, where she could see and enjoy the delightful weather, but she slid herself out of the chair onto the floor, striking her head and bruising it seriously. No exhortation or fear of punishment, here or hereafter, would make her exert herself. She was a hopeless, bed-ridden case, suffering from month to month. I advised removal of the ovaries and fallopian tubes for the purpose of arresting menstruation and removing what I thought to be the cause of her trouble. The operation was, however, made to embrace one ovary and tube only, the other one being sound and not having been the seat of pain on pressure. The abdomen was open but a few moments, so that there was little opportunity for ingress of air. The temperature of the room was above 50°. The pedicle was ligated with silk treated with corrosive sublimate solution 1 to 1000. The recovery was rapid. The abdominal muscles sloughed a little, and gave rise to a free discharge of pus from wound on the sixth day after the operation. The patient remained under my observation for months after the operation. Her health had so far improved that she had grown fleshy, although she continued to occasionally regurgitate food, and was able to do light house-work and needle-work enough to support her.

Case 3.—A., aged 52 years, Clinton St, Detroit, began failing in health with what he supposed was bleeding piles, about six months before I saw him. His stools would be loose and at times bloody. He had lost rapidly in flesh and strength. Although he had long suffered from chronic bronchitis and a dilated right heart, he knew the piles and diarrhœa were pulling him down. A tumor could be felt in the left iliac region. It was quite movable. The abdomen was flat and the colon not distended. His complexion was cachectic. The finger searching the rectum, could find nothing. The rectal tubes passed freely and brought away blood. Cancer of the sigmoid was diagnosed, and an exploratory operation with a view to its removal proposed. The operation was made during chloroform anæsthesia. The abdomen was opened with scissors to prevent loss of any considerable amount of blood. The finger searched the abdominal viscera and found the cancerous infiltration of the colon to extensive to admit of removal. The wound was closed with interrupted suture, which had been rendered aseptic by use of corrosive solution, 1 to 1000. Recovery from this operation was rapid and complete, although the patient succumbed two weeks later to the combined influence of cancer and chronic bronchitis.

Case 4.—Mrs. L., Deerfield, Mich., aged 30 years, of good constitution and general health, had a very large fibroid tumor which was of such peculiar triangular shape that when moved between the two hands it gave the sensation of two distinct tumors. She had carried this tumor for several years, because its great size and hard character were deemed unfavorable for operation. It hung over the pubes half way to the knees, and embarrassed respiration and heart action. An operation was imperatively demanded. On opening the abdomen the fibroid nature of the tumor was confirmed. The pedicle was found to originate in the left broad ligament, the left ovary being involved in the tumor. The abdominal incision had to be carried from symphysis pubis to within an inch and a half of the ensiform cartilage in order to get the tumor out of the abdomen. The peritoneum was left perfectly clean, was open but a short time, and was closed with aseptic sutures. Adhesions were numerous and extensive, and had to be ligated before dividing. Recovery was complete.

Case 5.—Mrs. R. Congress St., Detroit, had suffered for years with most painful and profuse menstruation. She had taken ergot thoroughly but without benefit. Her abdomen began to enlarge about four years before I saw her. At first she supposed the enlargement was due to pregnancy, but time showed the contrary. Palpation revealed within the pelvic cavity and rising up out of it a nodular non-fluctuating tumor, which was growing rapidly and had attained a size about equal to the uterus in the 7th month of pregnancy. In the vagina the uterus was found crowded down upon the rectum and movable with the tumor. Neither could be recognized by bimanual examination. The sound was not introduced because the essential relations of the uterus to the tumor could be easily made out by palpation. The abdomen was opened by incision in the median line. The relation of the tumor to the uterus and to the bladder, urethra and rectum was of a character precluding extirpation. In the left broad ligament the arteries were found greatly enlarged as they punctated the tumor. They were included in a carbolized silk ligature and tied so as to shut off the blood supply to the tumor. The abdominal wound was then closed with interrupted sutures. About two hours after the operation the patient began to suffer the most intense pain in the lower part of the abdomen, requiring heavy doses of anodynes to control it. The temperature rose to 101° F. For the succeeding five days whenever the anodyne was withheld severe pain would return, and the patient would lie with knees drawn up, pinched look and rapid pulse, suggesting the invasion of peritonitis.

After that date there was no more pain and the patient was clearly convalescent on the 14th day after the operation.

Case 6.—Mrs. B., Woodward Ave., Detroit, a widow and mother of two children, had an attack of pelvic cellulitis, commencing eight weeks after the birth of last child, four years ago. Her husband was then living, and had suffered, as she said, from "kidney trouble, for which he had a small syringe and took a great deal of medicine." I found her emaciated, a constant sufferer from pelvic pain. Her uterus was retroverted and held down by a tumor about the size of an orange, and quite movable and painful. This tumor had been there, she thought, since she had the attack of inflammation of the pelvic connective tissue mentioned above. Her general health was rapidly and surely failing under the combined influence of the pain she suffered during menstruation and the disturbed digestion and nutrition manifested by her thickly-coated tongue, constipated bowels and general cachexia. An operation for the cure of the pelvic disease was needed. The abdomen was opened with a pair of scissors, and the tumor found to be a distended fallopian tube. Its contents were purulent, and were withdrawn with trocar. Then a ligature was passed about the pedicle close to the uterus and the tumor was excised. The abdominal wound was closed with antiseptic interrupted suture. Recovery progressed favorably until the tenth day after the operation, the temperature never reaching 100°. The abdomen was perfectly flat and the wound in its walls healed by first intention. A dressing of hydronaphthol cotton was used on it. That substance (hydronaphthol) was the antisepsis used in the water for washing the abdomen and cleansing the sutures and ligatures. On the tenth day she had a chill and the temperature rose to 103°. I suspected septicemia, but the condition of the bowels forbade any infection from that quarter, and I thought best to wait for other developments before opening the abdomen to search for pus. The patient became greatly excited by the unexpected visit of a friend whom she fancied had some dreadful news to relate. That visit brought on the emotional condition which caused the rise of temperature and which kept it varying from 101.5 to 104, for more than a week. With this high temperature came menstruation, which may have also contributed to the fever, or to the nervousness of the patient. No quinine or antipyretic of any kind was given. The bowels were moved once with salts. Recovery was perfect and only delayed by the fever I have just described.

At the commencement of these notes I thought to include a number of cases of hernia and intestinal suture which have recovered and which in the process of healing exhibited some strange freaks of temperature, but I have already taken more than my share of your time and will mention at some future time some of the anomalies of temperature peculiar to recovery from wounds of the abdomen.

THAT UNUSUAL FORM OF TYPHOID, AGAIN.

BY C. S. PARK, M. D., HUBBARDSTON, MICH.

During the past eighteen months I have attruded fifty-two cases of what is undoubtedly that unusual form of typhoid fever discussed in recent issues of the MEDICAL AGE, and which most correspondents consider to be typho-malarial fever.

For many years the annual reports of our State Board of Health have placed the per-cent. of reports made to them, which stated the presence of typho-malarial and remittent fevers much higher than the per-cent. stating the presence of typhoid fever. The disease under consideration has been common in many parts of the state during the past few years. I think the majority of physicians call it typho-malarial or remittent fever. The chief ground for considering the disease as other than true typhoid fever seems to be that its course is milder and the mortality less than in typical typhoid. I believe the disease is true typhoid fever without malarial complication.

The predominating symptoms of all epidemic diseases frequently widely differ in one outbreak from the predominating symptoms found in another outbreak of the same disease. In support of this it is necessary only to call to mind diphtheria or scarlet fever. Some epidemics of these diseases are accompanied with frightful mortality, and other epidemics are comparatively innocuous. May not this, be and is it not, true of typhoid fever. Because an epidemic of diphtheria or scarlet fever is mild, no one claims the cases are all modified by some other disease.

The evidence that a typhoid element has been present in the cases I have observed, seems to me to be indisputable. A few of the cases presented so many of the symptoms of typical, grave typhoid that the diagnosis was clear. A greater number of mild, irregular cases occurred at the same time, in the same neighborhood, even in the same family. No other disease which may resemble typhoid, such as malarial fevers or influenza was prevalent at these times. Nearly all the mild irregular cases presented one or more symptoms, which seldom occur in any disease other than typhoid fever. Slight nose-bleed or the characteristic typhoid eruption occurred in at least half the cases. Were all the so-called typhoid fever symptoms found in a group of six or seven patients combined in one case, no one could question diagnosis.

The disease differs in most cases from what

the experience of past years leads us to regard as the usual form of typhoid. Its commencement is often more sudden, its course milder, many of the usual symptoms are feebly marked or wanting, the range of temperature is different, the mortality is less. These and all other variations from the type, which I have seen, to my mind give no support to the theory that there is a malarial complication.

Malarial diseases have, for many years, been uncommon in this locality. I have not seen a clear case of intermittent or remittent malarial fever in two or three years. I occasionally see an irregular fever which quickly yields to, or in spite of, a few large doses of quinine, but which can not be given the text-book classification given to malarial fevers.

All of the considerable number of authorities I have consulted state that as compared with typhoid, typho-malarial fever is an uncommon disease. Especially is this true in a non-malarial region. Of these cases observed by me not more than six or seven presented the train of symptoms which some physicians and most laymen think necessarily accompany a case of genuine typhoid fever. But two of the fifty-two patients died. These two were treated by other physicians for malarial fever, and no restrictions as regards diet given, until, when I began treatment there was no ground for hope of a recovery. Five or six of my cases were certainly pure typhoid fever of a grave form. Is it reasonable to suppose that in this region, almost free from malaria, the other forty-five or forty-six cases were typho-malarial.

The low mortality of two in fifty-two cases is not proof that the disease was not typhoid fever. I am not one of those physicians who say (not even of patients of other physicians) that if a case of supposed diphtheria or typhoid fever recovers there must have been a mistake in diagnosis. Let us not forget the walking typhoid mentioned in most text-books, but which I think is frequently not recognized as such. I never read that these cases are modified by a malarial element.

If I were writing in praise of some special method of treatment, my low morality might be accepted as proof of the efficacy of that method. This digression reminds me that my treatment is different from that pursued by other physicians. While I admit a sort of superstitious faith in this treatment which induces me to continue it, I really believe the favorable termination has been due to the mild form of the disease. I give 5 to 10 grs. of calomel at one dose every second day during the first week, and $\frac{1}{200}$ to $\frac{1}{30}$ gr. red iodide mercury every two hours during the day, and when awake at night, throughout the sickness. This, with milk or liquid diet, constitutes the treatment in most cases. Special symptoms only occasionally demand treatment. The usual duration of fever has been from two to three weeks After careful observation in many cases, I am unable to see that quinine does more than to add the unpleasantness of cinchonism. I now seldom give it, except in the beginning of doubtful cases, that its effect may be of service in diagnosis.

It would require too much space to give details of cases, the most careful observation of which has thoroughly convinced me that this disease is typhoid fever. There is little or no evidence in support of the unreasonable assumption that nearly all the cases of typhoid fever found in this non-malarial locality are complicated with or modified by the malarial poison, and are typho-malarial fever.

It is not reasonable that the typho-malarial fever, if it occurs at all in Michigan, is more common than pure typhoid.

I believe physicians who call this mild or unusual form of typhoid fever, typho-malarial, are in error.

SOME THOUGHTS AND INTERROGATIONS ON OBSTETRIC PRACTICE.

BY DR. D. B. SURFACE, BLUFF CREEK, IND.

I read in a stray medical journal, not long since, two articles on obstetric practice which held very different views, particularly in reference to the use of ergot. One writer maintained that ergot was the cause of nearly all the still-births.

Now, though my experience is limited, I have had several still-births, but never one after the administration of ergot, although I frequently give the drug when the pains are insufficient, after the os is dilated; I have no fear in giving ergot after the womb is fully open and the pains are weak or flagging.

I want to ask if there is not such a thing as inertia of the uterus? I have had a few cases where, after the child was born, the uterus seemed to contract on the placenta and remain so, and I had to remove the placenta with my hand, after using ergot, kneading over the womb and traction on the cord. I waited, in one or two cases, two hours before removing, which was certainly long enough! Playfair says you can almost always remove the placenta by kneading over the uterus; I have not found this true in my practice. To the beginner I would say: after you have tied and cut the cord place the left hand on the patient's abdomen, making gentle pressure over the fundus, and at the same time make steady but not strong traction on the cord, directing the patient to bear down by a long and forced expiration, and you will soon be rewarded by the expression of the after-birth.

I always direct the nurse to wash the genitals (external) with a weak carbolic acid solution, at least once a day, for five or six days,

and I have never had a case of so-called child-bed fever. Do not direct the patient to use alcoholic stimulants unless the pulse should become very feeble.

One more thought: the most of our obstetric works say the custom in this country is to have the patient on her side. In Ohio and Indiana this is not the case. I have delivered but one lady on her side, and a number of old ladies have told me they never saw a case of the kind. As a rule, allow your patient to "do as she pleases" during the first stage—sit, lie, stand or walk—and she will tell her friends you are the best accoucheur she ever saw.

VAGINAL HYSTERECTOMY. REPORT OF THREE CASES.

BY J. H. ETHERIDGE, A. M., M. D. (RUSH).*

The three cases reported herein were operated on at the Presbyterian Hospital. I can never convey an adequate idea of the relief to the operator offered by the method of hæmostasis by forcible pressure on the broad ligaments over that of ligatures. I think no one can fully appreciate the untold superiority of the former method over the later till he has had experience in the performance of that operation under both methods.

Case 1.—Mrs. S., æt. 47, mother of nine children, always well, presented herself February 1, 1887, with epithelioma of the cervix uteri. It did not involve the vault of the vagina. The broad ligaments did not seem to be thickened. Mobility of the uterus was complete. After preparatory treatment with a daily laxative and diuretic for a week, the operation was performed on February 8, 1887.

The cervix was easily drawn down to the vulvar orifice and, with scissors, its vaginal attachment was divided. Strong adhesions to the bladder and rectum were found, and in consequence thereof, the rectum was opened in one place and the bladder in two places in the process of freeing the uterus from these two organs. After the two broad ligaments were sufficiently isolated and the fundus was turned backwards and brought down, the left broad ligament was first penetrated and divided into two sections with heavy ligatures, and tied as securely as hands could tie them. It was then severed as closely to the corpus uteri as possible, and the whole organ came out of the vagina. Treating the right broad ligament similarly was a much easier matter, because the uterus was down and out of the way. This attachment was at once severed and the whole organ was then freed from the patient. The ovaries were then removed. The rent in the bowel was closed by continuous suture without difficulty. The longer rent in the bladder was then closed by continuous suture, but it was done at a great disadvantage from its peculiar position, back of the symphysis and looking directly backwards To draw down the bladder and to so evert the edges of the rent as to apply the stitches was a delicate and difficult task. The smaller rent, undiscovered at that time, was not closed. Just as this sewing up was completed there was observed welling up into the shapeless excavation left after the removal of the uterus, great quantities of arterial blood. Which broad ligament it came from it was impossible to decide. After a long time the bleeding vessel, which was in the right ligament, was secured, but not till after a ligament was pushed off of the left broad ligament. All vessels were eventually secured, but not till a great quantity of blood had been lost. The top of the vagina was closed from before backwards with continuous suture, the ligatures were brought down, iodoform gauze stuffed into the vagina and the patient put to bed.

Reaction followed reluctantly. She died from peritonitis and exhaustion in 45 hours, having passed 8 ounces and 1 drachm of urine in the meantime. The autopsy revealed a small rent in the bladder, which was concluded to be the cause of the peritonitis.

Case 2.—Mrs. C., æt. 36, laundress; tall, spare, nervous, sanguine temperament, presented herself February 10, 1887, with a small epithelioma in the cervix uteri. The upper portion of the vaginal cervix was not invaded. The choice between amputation of the cervix and hysterectomy was left to the patient after full explanation of the dangers and results of the two procedures. She decided to have the latter operation, which was performed on February 25, 1887.

The uterus was easily drawn down to the vulvar orifice and freed from its vaginal attachment with the scissors. The bladder was uncommonly closely attached to the uterus, and before its complete separation was accomplished it was opened. The opening into the Douglas cul-de-sac was easily effected and the fundus rocked backward through the sacral hollow, down and out through the vulva. The broad ligaments were secured with silk ligatures and the uterus removed after its separation from them. The ovaries were separately removed immediately afterwards. In closing the vesical rent the left broad ligament shed its ligatures and bled profusely. Hæmorrhage was soon checked. The vagina was closed from before backwards, the ligatures were brought down into the vagina, and the latter organ was filled with iodoform gauze.

The patient rallied well. The temperature rose to 100° on the second and third days. Thereafter nothing worthy of special mention

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occurred. On the tenth day an elastic ligature attached to the patient's left thigh was tied to those protruding from the vagina, and in five days they began to come away and in 48 hours the last one was removed. In 36 days she left the hospital.

Case 3.—April 13, 1887. Mrs. C., æt. 49, last confinement 28 years ago; she is still menstruating regularly every three weeks, flowing one week.

Six months ago she began to have leucorrhœa and to lose occasional small amounts of blood. She has excellent general health. She is a good breakfaster, digests well and is a good excreter from the bowels, kidneys and skin. She is well nourished, and presents a promising outcome for any surgical ordeal. The only thing that one could wish different in her general aspect is a too rapidly acting heart. It beats over 90 times per minute and the arterial impulse is persistent. She has often seen lateritious deposits in her renal secretion.

Examination reveals an epitheliomatous degeneration of the cervix, with about ¼ inch of uninvaded tissue of the cervix between the cancer and the vaginal vault. The uterus was about 4 inches deep and it bled freely upon withdrawing the sound. The fundus was large and was easily felt through the abdominal wall. The uterus was freely movable, indicating the non-implication of the lymphatics in the broad ligament. The absence of invasion of the vaginal wall and of the circum-uterine tissues led to the recommending of an operation for the removal of the entire uterus.

From April 19 to May 5, the date of the operation, she took cascara daily, and digitalis and acetate of potash. The condition of the excretions seemed as nearly perfect as possible, preparatory to an operation. The patient slept in the hospital the night before the operation, and took the customary general antiseptic bath and had administered several vaginal bichloride douches.

Operation.—The cervix was drawn into the vulva with two large, lock vulsella forceps while the vaginal attachment to the cervix was divided with the scissors. Gradually and patiently the circum-cervical tissues and the attachments of the bladder and rectum were crowded away with the finger-nail till the Douglas cul-de-sac could be opened. Then it was found quite impossible to reach the top of the fundus with the fingers. The cul-de-sac of peritoneum between the bladder and the uterus was then opened, with hope of being able to retroflex the uterus by means of the fingers placed before and behind the uterus. This manœuvre was found likewise to be an impossibility. After repeated vain attempts to reach the top of the fundus with the fingers, that method was abandoned. Trial of very deep supra-pubic pressure to thrust the fundus back toward the sacral hollow, and at the same time of grasping and pulling down the fundus with a small vulsellum forceps thrust through the Douglas cul-de-sac, at last succeeded, after three or four tearings of the forceps, in getting the top of the uterus out into the world.

Snap forceps were then placed on the broad ligaments and the latter divided. The subsequent dressing consisted in tucking a thin layer of iodoform gauze into the vagina, care being taken to avoid separating the top of the vaginal walls. The danger of separation must be patent to any observer. RIBOLLET attributes the death of one of his patients to crowding too much gauze into the upper vagina.

No stitches were used to close the upper end of the vagina. Its borders were permitted to collapse and to close in any position that they chanced to occupy. The fear that the bowels and bladder might seek an outlet through the vaginal tract is wholly groundless. One ligature was used for a vaginal artery. No attention was paid to it in the final dressing. The ovaries were both removed after the uterus was finally separated from its attachments.

The patient reacted well from the shock of the operation, which consumed seventy-five minutes. Her daily progress was so uniformly satisfactory that any detailed descriptive statement of it would be monotony itself. The pulse ranged from 90 to 120 beats per minute; it was 98 when she left the hospital. The temperature reached 100° one *morning* only, and on five evenings, from third to the seventh days inclusive.

The amount of urine passed daily during the first fourteen days after the operation is indicated by ounces in the following figures: 19, 19½, 25, 23, 26, 24, 23½, 25, 30, 31½, 34, 40, 35 and 26½.

The forceps, one pair on each ligamentum latum, were removed at the end of 48 hours. Although anyone knows that 48 hours of obliteration of the lumen of an artery must necessarily destroy its patency, yet the writer was filled with misgivings when the forceps were very carefully unwrapped and as carefully removed as gentleness itself could supervise. The folds and creases of the vagina as far up into the shapeless excavation as vision could peer, upon an exaggerated separation of the vulva with the fingers, were watched with an intensity of eagerness and anxiety, for their being inundated with the hot scarlet blood that so easily comes from the ovarian and uterine arteries, that can be appreciated only by him who has experienced those emotions. No bleeding followed the removal of pressure from the uterine ligaments. The vagina was not again filled with gauze. Iodoform was blown into this cavern as far as possible daily.

It was impossible to state definitely the amount of drainage that escaped. Perhaps 3 tablespoonfuls daily for the first two days would cover it; afterwards the amount could not have been more than 1 tablespoonful on the third or fourth days each. After the fourth day none escaped to mention.

Case 4 came to me several weeks ago for an incoercible hæmorrhage. The patient, a woman 47 years of age, had borne eleven children, and had been having hæmorrhage for eleven years. Everything in the way of medicince had been tried; the uterus had been curetted upon two different occasions, and she came to me supposing the ovaries must be taken out. I explained to her that I had had two cases of removal of the ovaries for hæmorrhage, but that the operation had not cured the hæmorrhage. I also explained to her the danger of removal of the uterus and she consented to the operation. The steps were simplicity itself, being a repetition of what I have given. The cervix was easily drawn down to the vulvar orifice and the cervical attachments freed at once as speedily as possible. An incision was made in the cul-de-sac of Douglas and I was able with a knife to divide the tissues without any trouble. I kept as close to the uterus as I could, and did not open the bladder. When the two broad ligaments were all that supported the uterus they were secured with long snap forceps, the broad ligament divided on the right and left sides. Snap forceps were put on the neighboring deep vessels; that was all the hæmostatic means that was resorted to from beginning to end.

The patient was put to bed about 3 o'clock, and about 6 I was telephoned that she was having a severe hæmorrhage. Concluding that it was one of the arterial branches from the vagina, I hoped that ergot would stop the hæmorrhage. When I reached the hospital I found that after the use of the rectal injection of ergot the hæmorrhage ceased. The case ran along very well for 48 hours; afterwards the temperature was 99° for two or three days and then it ran up to 101°. She was put upon the table and the wound exposed with a Sims speculum. Up in each angle or corner of the wound was a black, gangrenous-looking mass about as big as my little finger, hanging down upon the vagina; this mass protruded from a little cavity there filled with the débris of blood, which had probably been produced by the hæmorrhage on the day of the operation. It had decomposed and was smelling very badly. That mass was pulled out. In the other side I was able to pass the forceps up a distance of about 1½ inch. I got out all the shreds and put the patient to bed. The temperature at once went down to 98.2°, and since that time everything has progressed satisfactorily. This is the twenty-first day since the operation. I saw the patient this afternoon, and she calls for solid food and is to sit up tomorrow. The following are some points of interest concerning this operation:

1. *Indications for its Performance.*—(a) Ten years ago, and indeed until quite recently, the chief indication for the performance of vaginal hysterectomy was malignant disease. At present it is agreed by all operators that the earlier it is performed for cancer the greater are the chances for its non-recurrence. This dread malady always returns sooner or later after amputation of the uterine cervix, and of course proves fatal; whereas, when the whole organ is removed, the patient is given the only hope of a permanent recovery. Hysterectomy does not always prevent recurrence of the development of this neoplasm, yet it offers the best results. MARTIN reports 8 cases of hysterectomy from cancer without relapse, varying from two and one-half to five years. According to SANGER the average of survival after this operation is eleven months. OLSHAUSEN reports cases after operation of relapse, once after eighteen months, twice after two years, and twice after three years.

The most favorable conditions offered for hysterectomy are the non-involvement of the vagina, and complete mobility of the uterus, which shows the non-invasion of the *ligamenta lata*. In other words, the earlier in the disease the operation can be performed the better are the promises of a radical cure. Only too often does it occur that the disease has advanced too far before the gynecologist is consulted.

(b) *Procidentia uteri* is another condition for which this operation is performed. Anaplastic operations do not always restore the organ to its normal level. Artificial vaginal stenosis to the extent of the non-admission of the little finger has failed ultimately to relieve the procidentia through gradual dilatation of the vaginal channel.

(c) Fibrous bodies of the uterus which offer the point of departure for serious irregularities have constituted a cause for vaginal hysterectomy. Of course reference is had to small tumors. HEYDENREICH reports four cases of operation with four successes. He* considers that at present it is impossible to pronounce upon the relative merits of vaginal hysterectomy and of castration for small fibrous bodies in the uterus. Péar† recently reported a case of the same operation for multiple fibroids.

(d) The hystero-neuroses (inveterate dysmenorrhœa, neuralgia, convulsions, etc.), for which oöphorectomy is so often performed, PÉAN considers a justifiable cause for this surgical pro-

*Albert Heydenreich. De Hysterectomie Vaginale. Semaine Méd., Paris, 1886, vi, 69, 70.

†Gazette des Hôpitaux, October 12, 1886, pp. 950, 951.

cedure. His reasoning is, that these neuroses sustain an intimate relation to the uterus itself, consequently the uterus should be included along with the tubes and ovaries. (Caldwell, Paris Letter in Chicago Med. Jour. and Examiner, February, 1887).

As an illustration of the *furor operationis*, a recent article from the pen of a Cologne surgeon, Dr. Frank, published in the April 3, 1887, number of the Archiv für Gynäkologie, enumerates the following cases of removal of the entire uterus: For endometritis, four cases; for retroflexion or retroversion with fixation, three cases; *pruritus uterinus*, once; and for neuralgia and retention of urine, one case. The members of the medical profession can scarcely read the account of these cases without being astounded at the amazing temerity of such proceedings.

The various steps in the operation consist in, first, freeing the cervix from its attachments; second, hæmostasis, and, third, the subsequent dressing.

1. The cervix must be drawn down with forceps into the vulvar orifice if possible, and the vaginal attachment severed with any cutting instrument, a bistoury, a blunt or a sharp-pointed scissors. Some operators prefer one instrument, others another. It is a trifling choice to make between them. The vulva should be held open laterally by retractors deftly held within the ostium; if they are thrust into the vagina too far they prevent the forced descent of the uterus. If they are wide enough a perineal retractor is unnecessary. Just before making the initial cutting it is well to push up the cervix (which has been drawn down) to its natural level and mark with the eye where the vagina is attached, and then draw down the organ and begin proceedings. This point is rather important, because no one can tell where the vaginal wall terminates and the cervical covering begins, and one is invariably inclined to begin the enucleation too far away from the cervix, and thus to open the bladder. The encircling of the cervix can be made at once with tissues pushed away from the uterus in all directions till the broad ligaments are reached, when they will of course not be disturbed. The gravest necessity exists for keeping exceedingly close to the cervix anteriorily, otherwise the operator will find that he has opened the bladder almost before he has any idea that he is dangerously near it. By keeping as closely to the cervix as possible another important, nay vital, advantage will be gained, viz.: the avoidance of wounding the ureter, which perforates the bladder just above the middle of the anterior vaginal wall. Wounding this duct complicates matters most wofully, in that it necessitates the extirpation of the kidney. The surest way of determining the dangerous proximity to the ureter is to discover the pulsation of its accompanying artery, which is a branch of the uterine artery and is of considerable magnitude. Absolute safety from wounding this important channel is guaranteed to him only who keeps closely enough to the cervix in its denudation. Very soon the finger can be made to penetrate the peritoneal cavity, as will be indicated by its feeling the fundus covered with the smooth, glistening peritoneum. The freeing the posterior cervical wall should be prosecuted with the same care, to remain close to the uterus and thus avoid opening the rectum. The finger easily penetrates the Douglas cul de sac, and the body of the uterus can then be explored readily. Up to this point, when the peritoneal cavity is opened the bleeding is considerable, though not at all alarming. It is best to proceed as rapidly as possible and not to attempt to check hemorrhage. Occasionally the peritoneum is tough and cannot be perforated by the finger; then a blunt-pointed pair of scissors, *closed*, can be thrust into the cavity, quickly opened and withdrawn, leaving an opening large enough to admit the finger.

After opening the posterior cul-de-sac, some operators push a soft sponge into the peritoneal cavity to remain there till the operation is terminated, for the purpose of preventing the entrance of noxious matters and of keeping the bowels up and away from possible injury. It also serves the purpose upon its withdrawal of drawing down the ragged edges of the peritoneum so that in the wound peritoneum lies opposed to peritoneum, a most desirable position to be secured.

At this point two proceedures lie open: one is to bring the fundus down through anterior cul-de-sac or through posterior cul-de-sac—*i. e.*, acutely and completely anteflex the uterus—and the other is, to let flexion entirely alone and to proceed at once with the treatment of the *ligamenta lata* with reference to preventing other vessels from bleeding and dividing them, and thus freeing the uterus wholly from the body. Another plan resorted to before removing the organ has been, after securing the broad ligaments, to bisect the uterus from fundus to os, and removing each half separately. It must be a very exceptional case demanding this proceeding. When the uterus is small, flexion is an easy matter. When large it is a very difficult matter, and when very large it is a feat impossible to accomplish.

C. Staude* recommends opening the Douglas' cul-de-sac first and retroflexing the uterus completely before opening the vesico-uterine cul-de-sac, in order not to permit the cancerous cervix to enter the peritoneal cavity as the fundus is brought downwards. The ante-uterine peritoneal space thus shut off will ef-

*Deutsche Med. Wochenschrift, Berlin, 1886, xii, 602-604.

fectually prevent the cervix extering it. However, with the cervix firmly held by the vulsellum forceps it is impossible for it to ascend into the peritoneal cavity as the fundus is brought down. Furthermore, if the anteuterine space be not opened the work of securing the lateral vesicular supply must be greatly embarrassed, and the danger of wounding the ureters greatly, almost infinitely, increased.

The second step in the operation consists in hæmostasis and it includes securing and dividing the broad ligaments.

The devices that have been used to secure hæmostasis are almost legion. Until very recently silk ligatures only were used to secure the whole mass of the ligaments or to secure it in separate divisions by the continuous or by the loop method. Later the ecraséur, wire or the elastic ligature has been used. The cautery has been used. A separate catgut ligature for each tube has been recommended. Needles with a great variety of curves have been devised. The application of ligatures is attended with much difficulty, often failing in the most skilled hands.

By far the best method of accomplishing hæmostasis is the snap forceps. It is a sure method, it abreviates the operation and affords, additionally, perfect drainage. Before using them it is always well to test the rachet and ascertain whether they will hold permanently. Occasionally forceps will unsnap, and a greater calamity cannot befall an operation than to have that occur after leaving the patient. Tieing the forceps together when in doubt of their reliability can be done.

After the peritoneal cavity before and behind the uterus has been opened and the uterus has been completely flexed, when possible, and is retained by the *ligamenta lata* only, the latter are ready to receive the forcipressure. With the forefinger of the left hand hooked over the superior margin of the left broad ligament the right hand can adjust the forceps to compress the whole width of the ligament and tighten the instrument to the last notch. It is best to attach it as near to the uterus as possible and yet permit room for dividing the ligament easily at its uterine end. While adjusting the forceps it is of course scarcely necessary to mention the desirability of not including in them a bit of omentum or a piece of intestine. I know of no greater satisfaction in gynecological operations that the operator can experience than in tightening hæmostatic forceps on a broad ligament—a satisfaction greatly intensified when one has previously had the appalling accident occur of the shedding of the silk ligatures after the broad ligament has been permitted to contract and withdraw into the pelvis up out of sight.

When the uterus cannot be flexed, the forceps have to be applied in the best way that can be devised. With a much enlarged uterus the forceps can be applied to include broad ligament to the extent of the width of its jaws, the amount of ligament can be divided and up through the divided segment another pair of forceps can be pushed to include the remainder of the ligament, which in turn can be divided. When the finger cannot reach the superior magin of the ligament, the lower section of each ligament can be seized and divided, when it will be found that the whole organ can be made to descend and thus the entire ligament upon each side can be divided. When this procedure is necessary the difficulty of practicing is greatly increased because of the narrowing of the vaginal space.

After removing the uterus the parts should be allowed to retract in order to allow any vessels to bleed that are prevented from it by their traction. By this means arterial twigs are often discovered which otherwise escape detection. All further arresting of hæmorrhages can be accomplished easily with forceps. This step in the operation is of vast importance, since hæmorrhage can not result fatally, but even when not large it can become the unsuspected cause of a fatal peritonitis.

The last step of the operation concerns the management of the wound. The most elaborate sewing and draining of the vaginal cavity have been resorted to. Stitching the peritoneum to the vaginal wall is regarded necessary by some operators. One operator recently stated in his report of a case, that he stitched these two tissues together in front of the uterus before opening the Douglas' pouch. Stitching the anterior marginal border of the rent to the posterior border, drawing the ends of the ligatures out through their centre has been very commonly done. Running a purse string suture around the top of the vagina with a piece of rubber draining tube and the ligatures passing through the middle of the puckering has been used.

Sewing up the vagina is wholly unneccessary in most cases. These various closings of the vagina have been regarded as essential to keep back the bowels and prevent septicæmia through the vagina. Of the former there is a minimum danger. When the operation is completed the superior vaginal opening collapses as thoroughly and completely as the *ostium vagina* closes. The oozing opposed surfaces at once interdigitate and inaugurate the preliminary processes of union. They do not lie idle for 24 or 48 hours before commencing union is set up. At the end of 48 hours the top of the vagina is all closed to the passage of fluids excepting through that portion of it occupied by the means of drainage.

The use of iodoform gauze in the vagina is of the utmost importance and when wrongly used is a source of danger. The vagina must be absolutely aseptic, and herein the gauze filled

with iodoform becomes of such great service. Stuffing the vagina too full of this agent keeps apart the walls of the top of the vagina and prevents their union.

CHICAGO MEDICAL SOCIETY.

STATED MEETING, Nov. 21, 1887.

The President, W. T. BELFIELD, M. D., in the chair.

DR. L. L. MCARTHUR read a paper on

THE PRESENT STATE OF TETANUS.

Tetanus is divided into acute, subacute and chronic. Every case of tetanus has, as a primary factor, a traumatism which may be no more than the prick of a hypodermic needle, or may be the crushing of a limb. Blacks are said to be more liable to tetanus than whites. The occupation must also be taken into consideration, hostlers, gardeners, etc., being especially susceptible to the disease. It is claimed that tetanus is always infectious and never spontaneous. The case was mentioned of a New York surgeon, who, when making a post-mortem examination of a horse that had died of tetanus, accidentally scratched his finger, and shortly after died of the same disease. Experiments have been made by which a micro-organism, cultivated from garden soil and introduced under the skin of animals, produced tetanus, and muscular tissue obtained from a case of tetanus introduced under the skin of lower animals reproduced the disease. Out of 16,000 cases of foot injuries during the War of the Rebellion, fifty-seven resulted in tetanus. In 12,000 hand injuries not a single case of tetanus was reported. In the acute stage the termination is always fatal by the end of the fourth day, from spasm of the larynx or heart failure. In the subacute, are 50 per cent. of recoveries. The chronic form terminates favorably in from thirty to sixty days. In the treatment nervous sedatives, combined with absolute quiet and rest, yield the best results. The bromides and opium seem to have the most beneficial effect.

DR. N. P. PEARSON: Yesterday I received a medical paper from Copenhagen, in which I saw a report of a case of infantile trismus. They have found bacteria there. They took a part of the navel and produced infection from it; they infected mice and guinea-pigs, and they died immediately of tetanus.

DR. FRANK BILLINGS: While in Cook County Hospital, there were, I remember, two cases of especial interest to me. One was a man about 30 years of age, who had received an inoculating wound from a pitchfork, through the foot, passing downward from the dorsum. He did not come to the hospital until trismus had commenced. The wound in the foot was suppurating then, and DR. MEACHER, of Portage, Wis., who was house surgeon, opened up the local wound and dressed it antiseptically. Tetanus developed, and on the third day after he entered the hospital the sciatic nerve of that side was stretched. It did not have a good influence, and three days afterwards the crural nerves were stretched, and after that the sciatic nerves were again stretched, without marked effect good or bad. At the same time he was put upon morphine and chloral, afterwards he was given the treatment recommended by DR. GUNN—hypodermic injections of physostigma. We began with $\frac{1}{8}$ of a grain repeated every three hours, and gradually increased the amount until the man took 3 grains every dose, of the stock which was in the hospital, without a perceptible effect. The stock giving out, a new supply was obtained, and the nurse went on giving 3 grains of the new supply. I was called suddenly to see the man, and found him with all the characteristic symptoms of physostigma poisoning—pinpoint pupils, and rapid, weak pulse, œdema of the lungs with rapid superficial breathing. I gave the usual antidotes, atropine and digitalis, and he soon recovered; the first thing he did was to assume the tetanus position—opisthotonos. He eventually recovered, but never regained his strength of mind—he was simple, had a peculiar laugh, and talked a great deal; before he had been a silent man, but he became very garrulous and was the clown of the ward. He disappeared from the hospital and I lost sight of him. Another case of interest occurred while I was house surgeon: A man was brought to the hospital with a simple fracture of one tibia; in two weeks trismus suddenly developed after a chill. On examining the man, I detected fluctuation over the seat of fracture and the bones were freely movable. DR. ISHAM was the attending surgeon. We made a compound fracture of it and drained the wound thoroughly, and although the trismus remained for several days, the man ultimately recovered with perfect union of the bones. Another case—which is not of special medical interest—was a boy who received a crushing injury of one leg. I amputated the leg in its upper third, the flaps united very well, but about the seventh day he was taken with a chill, and trismus commenced, and then tetanus developed. The friends of the boy consented to have the sciatic nerve stretched, but when we attempted to have it done—had the boy carried into the operating room—the warden and chairman of the hospital committee interfered and commanded us to take the boy back; as a result, the old medical board stepped out of the County Hospital. We afterwards stretched the nerve and the boy recovered—making three recoveries from tetanus during my service in the hospital. Several

other cases of tetanus occurred from 4th of July pistol wounds, and death followed in every one. The temperature just before and after the death was the same as in all hydrophobic patients—it rose toward death, and my thermometer, which registers 110° F., would not register it.

DR. J. A. ROBISON: Last summer, during my service in the County Hospital, there was a case of tetanus developed in my ward. The man was brought in in May, with what was supposed to be cerebral meningitis; he had a high temperature, face flushed and of a purple hue. He was easily excited, and in a day or two we noticed symptoms of tetanus; trismus and ophisthotonos occurring during the progress of the case. During the January previous, he had received a wound from a buzz saw in the second and third fingers of the right hand. He was sent to the surgical side and these fingers were amputated. For several days it was a question whether or not he would recover, but he finally did recover, and the last I saw of him he was walking about the ward, although he was insane. I think the amputation probably saved his life, because these fingers were undoubtedly a source of irritation, as he would have tetanic spasms only when these fingers were touched. This would seem to indicate that it is possible that old wounds act as an exciting cause of tetanus.

DR. L. L. MCARTHUR: In regard to the frequency of recoveries in the cases reported, of fifty-four out of seventy seven, I would say that it is probable that the cases which terminate successfully find their way into the medicel journals, while those that terminate fatally are not so frequently published, and this will explain the apparent excess of cures over deaths. To say that the disease is a frequent one I think is a mistake—it is one of the rare diseases; although one sees it occasionally in practice. During the entire war there were reported 28,000 wounds of the hands and feet, and of these only fifty-seven resulted in tetanus (i. e., ½ of 1 per cent.), thus showing that the disease is not very frequent. I am glad to learn that tetanus has been proven to be of an infective nature, because this offers the best explanation of the causation of this disease that has yet been given. Several eminent authorities have defined tetanus as a disease of uncleanliness, which would rather point towards its infectious character. In the case reported by DR. ROBISON, he admits that there was a meningeal doubt in the case, and I think in many cases of so-called tetanus, investigation would prove them to belong to a different class of nervous diseases. One point I think well worthy of emphasis, that is the continuance of the treatment long after all the symptoms of tetanus have disappeared, and I very much regret, in the last case which I had, that I diminished the amount of medicine that the man was taking, during an apparent improvement in the course of the disease. Several French authorities also urge this point.

DR. W. T. BELFIELD reported a case of

NEPHRO-LITHOTOMY.

JAMES F., 37 years old, gives the following history: Some fifteen years ago he suffered for several months from great irritability of the bladder, urinating very frequently and with considerable pain. On several occasions he passed blood. Was treated at that time for "cystitis." These symptoms gradually disappeared; at intervals thereafter he suffered from dull pain in the loins, often extending upward to the chest and sometimes incapacitating him for work. For the past two years pus had been seen in the urine constantly in varying quantity. At times the amount would be small for a few days, during which time the pain in the side became severe, then a large quantity of pus would be discharged while the pain diminished. After treatment for various complaints he came, about a year ago, under the care of DR. FRANK BILLINGS, who discovered an increased area of dulness over the left kidney, and at times a distinct, though slight, swelling in the loin. Recognizing that the left kidney was the seat of suppuration, DR. BILLINGS endeavored to ascertain the cause therefor. Tuberculosis was almost certainly excluded by repeated examinations of the pus for the characteristic bacilli, with negative result. As renal calculus seemed the most probable diagnosis, DR. BILLINGS referred the patient to me for operation. After thorough examination and observation this seemed to me also the most plausible diagnosis, though many of the acute symptoms of calculus did not then exist. The right kidney could be felt through the abdominal walls and seemed normal, but previous to the operation, I endeavored to demonstrate its integrity by closing the ureter of the one under suspicion, by means of Silbermann's catheter. The instrument caused so much pain, however, that the result was unsatisfactory. June 26 last, in the presence of DRS. BILLINGS, HOSMER and TILLEY, I explored the left kidney through an oblique lumbar incision. The organ was found to be enlarged and flabby. Upon incision of the cortex an explanation of this condition was found in hydronephrosis, only a shell of the renal tissue half an inch thick, remaining. The cause of hydronephrosis was found in a calculus of conical shape some two inches in length, its smaller end impacted in the ureter so tightly as to require some force for its extraction. A few loose flakes were afterwards removed from the pelvis and ureter. Recovery ensued without notable event. On the fourteenth day the patient visited his place of business. In two

months his weight increased from 105 to 123 pounds, and all morbid symptoms had disappeared except that some pus was still present in the urine. Latterly this has become so slight in amount as to be discoverable only with a microscope. Presumably the shrivelling of the distended kidney is about accomplished. The stone is an oxalate or mulberry calculus, and weighed 224 grains.

DR. BELFIELD also reported a case of

CANCER OF THE PROSTATE.

HANS J., aged 48 years, was admitted to the County Hospital, suffering from unduly frequent and somewhat painful urination. Symptoms which had existed for some three months. On two occasions blood had been observed in the urine. Examination *per rectum* showed a slightly enlarged, though symmetrical prostate, along the centre of which, instead of the normal depression, was a slight proturberance. By the microscope we found in the urine a few blood corpuscles. A tumor of the prostate, either epitheliomatous or malignant was diagnosed. The latter seemed more probable because the quantity of blood in the urine was altogether too slight for the benignant variety. Efforts to entangle and bring away shreds of the supposed growth in the eye of a metallic catherer, failed. May 7, the bladder was explored by supra-pubic incision, and a malignant villous growth was found growing over the left side of the prostate, the villi projecting an inch or more into the bladder. These were removed with forceps and spoon and the base cauterized. Recovery ensued without notable event, and for eight weeks the renal function seemed almost normal, then the former symptoms began again and steadily increased in severity. The growth finally entirely filled the bladder and involved the abdominal wall, producing a small fistulous opening, and constituting a tumor which could be plainly outlined above the symphisis and though the rectum, apparently filling the pelvis. Death occurred October 8. Only the glands in the immediate vicinity of the bladder were found to be carcinomatous and no secondary growths in other organs were discovered.

DR. ELBERT WING: There is a point in regard to the exclusion of tuberculosis by the examination mentioned, that is perhaps of interest in this connection. A gentleman who served for two years as interne at Tübingen, told me that they had a case there which they thought was tuberculosis of the renal tract, and that they made between sixty and seventy very careful examination of the sediment of the urine for the bacilli of tuberculosis, but found none. At the autopsy they found tubercular ulcers in the kidney, both ureters, bladder and urethra.

DR. ELBERT WING exhibited a specimen from a case of

TYPHOID FEVER:

I have here some fresh pathological specimens obtained at the County Hospital to-day. The first is a portion of the intestine of a man who died of typhoid fever. It shows the swelling and tumefaction of the glands very nicely. There are also a few ulcers. There is a point of interest about the case aside from the typhoid fever, which was the involvement of the respirations, averaging between 40 and 60; pulse 120, temperature 101.° When the case came to the post mortem table the lungs were found to be quite extensively œdematous.

DR. WING also exhibited specimens of a case of

CIRRHOSIS OF THE LIVER WITH MARKED ASCITES.

The man had been tapped a number of times and finally died in the hospital from œdema of the lungs. He also had a scrotal hernia, and in addition to that there was an hydrocele of the same side. The omentum was attached to the anterior surface of the sac perhaps two inches from the external ring, and throughout the omentum there are wide bands of connective tissue which have formed through chronic passive hyperæmia. All of the connective tissue about the liver was in a similar condition. The hydrocele was the size of a goose egg, and has been incised. The testicle is perhaps one-third smaller than one would expect to find it. The organ of principal interest, however, is the liver. All that need be said about the history of the case, is that the man enjoyed the sobriquet of "Champagne Charlie." It is as hand some a specimen of gin drinker's liver as one ever sees. One can see the little projecting islands of tissue, which are almost small enough to give the liver the appearance of granulation tissue. By way of emphasis of the difference between this kind of cirrhosis and the so-called biliary cirrhosis, of which there is not as yet much definitely known by the profession at large, I have taken the trouble to bring some slides of this and of the biliary cirrhosis. They demonstrate very beautifully the difference in the way in which the connective tissue is distributed throughout the organs. In diffuse cirrhosis it is peripheral to the lobule, and surrounds nearly all of the lobules in any given field, but the connective tisssue in biliary cirrhosis shows itself first around the gall-ducts as little circumscribed islands clearly defined. There seem to be two forms of biliary chirrosis, one with and one without hypertrophy of the liver, the former usually occurring as an acute disease in cases of hard drinkers.

Correspondence.

THE MEDICAL AND SURGICAL HISTORY OF THE WAR OF THE REBELLION.

In reply to C. M. FULTON, M. D., MEDICAL AGE, Jan. 25th, I beg to say that in 1884 the Committee on Printing introduced this resolution, which passed: "That the public printer is hereby authorized to print and bind in the usual style 5,000 additional copies of the Medical and Surgical History of the War of the Rebellion, all of which are to be sold to applicants at cost, with 10 per cent. added. Provided that not more than one copy of each volume shall be sold to any one person."

I at once sent my order to the Public Printer for a set, and received the following reply:

OFFICE OF THE PUBLIC PRINTER,
WASHINGTON, D. C., Sept. 5, 1884.

F. J. GRONER, M. D.,
Big Rapids, Mich.,

SIR.—Your favor of the 1st inst, referring to "Medical and Surgical History of the Rebellion" is at hand. Your name has been placed upon the list, and you will be notified in ample time to make the necessary deposit before the plates are sent to press, should the orders justify it.

Very respectfully,
—. TAYLOR.
Chief Clerk.

I have not yet been notified. I think physicians generally have not known of this resolution.

I think it a great misfortune that the rising surgeons of to-day can not obtain this great monument of American medical literature. As the matter has lain dormant since 1884, I think the suggestion of the doctor that each physician write to the representative in Congress from his district, asking him to favor a bill that will provide for reprinting another edition, is a good one.

I would like very much to have the work, but do not care to pay $12.50 per volume, as I was asked for it when in New York city.

F. J. GRONER, M. D.

BIG RAPIDS, MICH.

SYRUP TRIFOLIUM CO. IN SYPHILIS.

WM B., aged 40, contracted syphillis in 1871; was imperfectly treated by the mercurials, the iodides and vegetable alteratives. When cutaneous symptoms would develop he would be placed for a few weeks on first one, and then the other of the above only until the symptoms would begin to abate.

In the winter and spring of 1887, nervous symptoms began to develop rapidly. Muscular twitchings came on, first one group then another until he found paralysis agitans. His color was bad, his a petite poor, and the poor man was generally "in a bad fix" and needed help. About that time, fortunately, I had received a reprint from the working bulletin of P. D. & Co., Detroit, in which the Syrup Trifolium Compound was recommended. I placed him on this preparation, withholding all other treatment, as I determined to give the compound a fair trial. Improvement as to general health set in after a pound had been taken, but the nervous twitchings were very much the same. I continued treatment and saw, to my gratification, that he was getting generally better, and after having taken five pounds I pronounced him cured.

Five months have passed since he has taken any medicine and he still remains free from any symptoms of his old enemy.

R. G. WITHERSPOON, M. D.

Holland's Store, S. C.

The druggists embrace an occasional opportunity to get back at the doctors who find fault with them for counter-prescribing. Their methods consist in the publication of some of the prescriptions sent in by registered, *i. e.*, legally qualified, physicians. Here is one *verbatim et literatim et punctatim*, from the National Druggist, to whom it was sent by an Arkansas druggist: "Podoflin 5 cts., Leptandra 5 cents, ruberb 5 ct., Pownded balsamphur 5 cts., Turpantine 5 cts., Niter oz. 10. To be mixed and took at bedtime." Our contemporary recommends this prescription to such of its readers as are tired of life and want to leave this world "a-screechin' an' a-screamin' for joy." If the Arkansas druggists charge for their goods at the same rates that their brethren up north do, the quantities of the above drugs which they would supply for the sums set opposite each, would scarcely be enough for a bird to successfully suicide with.

A correspondent (unfortunately an anonymous) sends us a marked copy of the Livingston Republican, of this State, which contains a graphic account of the sufferings of a young man who was "successfully treated" by two local physicians, one of whom some time since addressed a communication to the AGE severely condemnatory of this kind of advertising. The young man, it appears, was a painter, and his agony was unquestionably due to painter's colic. The mention of the doctors' names in connection with the case was, doubtless, quite without their consent. The practitioner is not always responsible for the doings of the ubiquitous reporter, and the unauthorized appearance of one's name in a newspaper report of a case, should have the effect of making him charitable towards the brother practitioner who happens to be similarly unfortunate.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., FEB. 10, 1888.

Editorial.

SOME RECENT DISCOVERIES IN CASCARA SAGRADA.

There has been no drug introduced to the profession within the past decade which has attracted greater attention or excited more discussion than cascara sagrada (rhamnus Pursh.) The circumstances of its introduction are still fresh in the minds of professional readers, and this introduction will always be regarded with peculiar interest because of the fact that it inaugurated the movement in the development of our indigenous flora which has so characterized the subsequent years. Had this movement been inaugurated by any drug of less intrinsic merit, the benefits which have accrued would, in all probability, have been postponed for many years. The magnificient triumph of cascara sagrada over the reasonable and unreasonable opposition, and the impartial and positively malignant criticism which were directed against it, has demonstrated the fact that good can come out of Nazareth. But it is a singular fact, that the opposition to the drug has not yet, in spite of the overwhelming mass of evidence in its favor, entirely ceased, and it was only a few months ago that no less an authority than DR. SQUIBB returned to the attack, firing what he intended should prove a Parthian shaft. The missile, however, fell impotent, the only damage which it did being to the reputation, as a scientist and fair-minded man, of him who fired it.

The attacks on this drug have, after all, been beneficial rather than harmful. They have been like the friction which is necessary to bring out the beauties of the stone, and the most determined onslaught has invariably resulted in bringing out testimony in its favor. The attack of DR. SQUIBB has not been an exception, for we have now before us an article by Messrs. H. F. MEIER and J. LE ROY WEBBER, in the American Journal of Pharmacy, of the current month, in which are given the results of a thorough investigation of the drug conducted by them. Among these results is the discovery in the recent bark of three bodies of great importance in both a pharmaceutical and physiological sense, to wit, a ferment, a glucoside and traces of ammonia. The ferment is apparently identical with that found in numerous other vegetable substances, as in cabbage, liquorice root, etc. The physiological action of this ferment is to cause griping pains and nausea. Its discovery explains the unpleasant action of the recent drug. Without knowing precisely why, the manufacturers of the most eligible fluid extract of the drug have been in the habit of employing no stock of a less age than two years, and an examination of samples of this age shows the absence of this ferment. The changes which take place in certain brands of the fluid extract, heretofore quite inexplicable, are now understood. The ingenuity of the pharmacist will now, doubtless, be directed toward the removal of this ferment, an accomplishment to which time alone has heretofore been equal. The glucoside which has been discovered seems to be peculiar to rhamnus Purshiana, the investigators having been unable to detect its presence in the rhamnus frangula. The part which this glucoside plays has not yet been definitely determined, but it is probable that it constitutes the essential difference between cascara sagrada and buckthorn.

While the article above alluded to is as yet chiefly of value from a pharmaceutical standpoint, enough has been indicated to cause us to look for important results from the discovery in a therapeutical sense. Cascara sagrada is held in such very high esteem as to be almost indispensable, by thousands of practitioners, but no one who has been in the habit of employing it but has been struck with peculiarilies in the behavior of fluid extracts sent out by different houses, and even in that of the fluid extract prepared by the same house. The causes of this irregular behavior have probably now been discovered, and it but remains to devise means for their prevention.

FILTHY LUCRE.

Although the precise origin of this term is involved in mystery, it requires no great stretch of the imagination to detect its eminent patness, as a designation for currency. The love of money, we are assured on very high authority, is the root of evil, but the revelations of the microscope, taken in connection with the bacillus theory of the propagation of disease, furnish abundant evidence that the circulating medium itself, independently of our affection for it, is a prolific *fons et origo malis*. In the discharge of its important function it is brought in contact with a great variety of company, and the proverb, "evil communications corrupt good manners," finds no exception in its case. As it starts out from the government

press or mint, as the case may be, it is a beautiful sight, as resplendent in its loveliness as it is radiant with power. Soon, however, its intense democratic proclivities cause it to become grievously besmirched. Regardless of age, sex, color, occupation, sanitary condition or any of the other differentiating influences operative among men, it circulates freely among all. The sheen which was erstwhile its beauty is now replaced with the dull leaden hue which its coating of filth imparts. A microscopic examination of this coating by the fastidious, would vest the bank-note with a repellence which nothing but the purchasing power of the paper could enable them to overcome.

But while the filthy coating of the bank-note is repellent to the fastidious, its positive danger lies in the germs of disease which are imbedded therein, and which it thus becomes the carrier and disseminator of. The currency is disagreeable, looks clammy and polluted, when, for instance, "it comes reeking from the pocket of the itinerant news-vendor, or city peddler, or when the butcher or oil-shop man hands it over redolent of paraffin, tallow or other commercial impurity." So far, however, it is simply nasty, but it is worse when, to quote a contemporary, "it leaves the desquamating hand of the scarlatinal patient to go to the hand or mouth of a healthy child. It is taken from beneath the pillow of the small-pox patient and given to the unsuspecting merchant, mechanic and laborer, or 'the poor, innocent lawyer.' It is cut from the rags of the itching and pediculous beggar to find its way into the pocket of a member of the Legislature, or a minister of the Gospel. It goes from the foul bootlegs of thieves and burglars, to be carried by the timid cashier to far off climes. Coins which but a few minutes before have been in perilous vicinity to the gonorrhœal discharge of the man-about-town are thoughtlessly placed in mouth of the lady while she buttons her glove. From the infected bosom and stockinged limb of the venial *marchande d'amour*, it is transferred to the palm of our mothers, wives and daughters. It is a travelling companion of Asiatic cholera and a sojourner with yellow fever." As an additional source of the filth to which money may be subjected in the course of its circulation, we might mention a circumstance related by a police officer who had arrested a prostitute charged with larceny from the person of a victim. After a most searching but fruitless examination of her apartments and her person, the officer, struck by a peculiarity in her gait as she moved about the room, succeeded, after considerable effort, in getting his hand between her thighs, and here he discovered the end of a roll of bills protruding from her vagina. On extracting the money he found it veritably coated with filthy leucorrhœa.

The extent to which currency is responsible for the spread of disease it would, in the nature of the case, be difficult to determine. Enough is, however, known of its agency in this direction to cause greater care in the handling of it than usually obtains. A more filthy practice and dangerous withal, than the common one of repeatedly wetting the tips of the fingers from the tongue, in counting a roll of paper money, in the light of what is known of the matter which clings to the old bank-note, can hardly be imagined. We do not want less money, but we do want greater care in handling it.

ERYTHROPHLEINE—THE NEW ANÆSTHETIC.

Dr. Lewin, of Berlin, whose experiments with kava-kava and sassy bark have contributed so much to the knowledge of those drugs, has just concluded a series of experiments with a new African arrow poison called Haya. During the course of those he discovered that an aqueous solution of this poison had an anæsthetic action on the cornea, the anæsthesia taking place later than as a result of the application of cocaine, but lasting for eight or ten hours. Certain peculiarities in the gross appearance of the Haya poison reminded Dr. L. of the sassy bark upon which he had worked some thirteen years before, and he was thus prompted to further experiments the result of which demonstrated that this bark constituted an ingredient of the poison. It required but a step further to the discovery of the fact that the sassy bark, or its active principle, erythrophleine (isolated and prepared by Merck, of Darmstadt) is possessed of anæsthetic properties. The best results on the cornea were obtained from an 0.25 solution, stronger solutions having an irritating action on the conjunctiva. This discovery will, doubtless, prove a valuable one, and the results of the further experiments which the distinguished discoverer is conducting, will be awaited with interest.

Notes.

It is asserted of the citizens of Cincinnati that it is easy to persuade them that the doctor who rides in a close carriage knows more than he who makes his visits on foot. Perhaps the people of other cities are a good deal like their Porkopolis fellow-citizens in this regard. The late Dr. Biddle, of Philadelphia, is, however, alleged to have entertained different views on this question of horse or no horse. He did his work (and he had a great deal of it to do) entirely on foot. The driving of one horse, he held, is evidence of physical weakness, and the driving of two horses is an indication of mental weakness. What he would have said of the

doctor who goes about in a closed, two-horse carriage, with the driver in livery, can only be conjectured. But there is no doubt that this sort of thing is valuable for its advertising effect, and no one can gainsay its legitimacy.

Dr. Keith, of Edinburgh, is very strongly committed to the electrolytic method of Apostoli in the treatment of uterine fibroids. He has tested it in one hundred cases. "So strongly do I now feel on this subject," he says, "that I would consider myself guilty of a criminal act were I to advise any patient to run the risk of her life, before having given a fair trial to this treatment, even were I sure that the mortality would not be greater than that which hysterectomy has given me in my private cases." He has just published a table of twenty-six cases of hysterectomy, and these, he says, will probably be the last he will ever do. He expresses the deliberate opinion that the operation is one which does more harm than good.

The London correspondent of the N. O. Medical and Surgical Journal says of Sir Geo. Burrows, Bart., who died recently, that he at one time held the leading place among London physicians. Tennyson's Yorkshire Farmer's advice was "Dinna thou marry fur munney, but goa wheere munney beä." Sir George married the daughter of John Abernethy, the famous surgeon of St. Bartholomew's; he was himself physician to the hospital, and his daughter is married to Mr. Willett, now surgeon to the same institution.

Dr. Guice, of Winnsboro, Ala., writes that from his experience of twenty-seven years, he is prepared to state with all necessary positiveness, that gonorrhœa is not a preventive of conception, Dr. Goodell to the contrary notwithstanding. We presume it makes a great deal of difference whether the specific inflammation has extended into the uterus. Confined to the vaginal lining, it could scarcely interfere with the course of the spermatozoa.

Therapeutic Brevities.

Hippurate of Lime.—This remedy is recommended by Poulet in catarrhal affections of the mucous membranes, particularly of the genito-urinary tract. In cystitis, regardless of its cause or nature, the remedy is said to be very beneficial. Chronic hepatitis, congestion of the liver, catarrhal jaundice and the long list of gouty and rheumatic affections and dyspepsias of inflammatory origin, also furnish indications for its use, and in some of these it is singularly useful. The following is a convenient formula for its exhibition:

Pure hippuric acid, 100 grammes.
Lime water, q. s.
Warm water, 2 litres.
Sugar, 5 pounds.
Essence of lemon, 15 grammes.

Add the lime water and acid to the water heated to 80°, trying from time to time until complete alkaline reaction is obtained; then add sugar and the flavor, and melt on a slow fire. Two tablespoonfuls of this may be given in water half an hour before each meal.

For Tapeworm.—Bettleheim (Centralbl. für Klinische Med.) recommends the following. The pills are coated with keratin, which is insoluble in acids, and, therefore, they pass through the stomach undissolved to find in the alkaline secretions of the intestines their solvent. Nausea and vomiting are thus guarded against, besides the securing of the direct action of the drugs:

℞ Ext. filicis maris ætheris, gr. 150.
Ext. pumicæ granati., gr. 150.
Pulveris jalapæ, gr. 45.

M. Div. in pil. No. 70.

Before giving a free catharsis must be induced. Twenty of the pills are to be taken on the day following the purge (during which the patient must fast) and the remainder on the next day in two or three hours.

For Rheumatic Affections.—The following formula is in use at the Jefferson Medical college:

℞ Sodii salicylatis, ℥ ss.
Glycerini, ℥ ij.
Olei gaultheriæ, gtt. xx.
Tr. ferri chloridi, ℥ ss.
Acidi citrici, gr. x.
Liq. ammonii citratis, q. s. ad ℥ iv.

M. Sig.—Two teaspoonfuls three or four times daily.

For Pharyngitis.—In cases of what is known as "minister's sore throat," the following is recommended by Prof. Garretson (Medical Times):

℞ Acidi carbolici, gtt. xij.
Tr. iodi comp., gtt. lxxv.
Glycerini, ℥ ij.
Aquæ, ℥ iiiss.

M. Sig.—Use as a gargle properly diluted.

Medical Progress.

ELECTRICITY IN THE TREATMENT OF FIBROID TUMORS.—At the last meeting of the British Medical Association an interesting paper on this subject was read by the great exponent of the use of electricity in fibroid tumors of the uterus, DR. G. APOSTOLI, of Paris; this paper, with one on the same subject by DR. W. E. STEAVENSON, is published in the British Medical Journal, of October 1. Two such papers bearing on this subject are particularly interesting in that they set forth the conservative principles of a specialty that is too much, or likely to be too much, an operative specialty.

What DR. APOSTOLI has done in the application of electricity to tumors of the uterus has been, in a few words, to supplant the old methods of operating by a method that is precise, energetic, tolerable, better localized, thoroughly under control, and more scientifically exact. He made it precise by the introduction of new galvanometers of intensity, exact counters and measures of the electric current; energetic by a novel service of high intensities of current; tolerable, notwithstanding the large doses of electricity, by introducing a new form of electrode, the wetted clay, thus making the cutaneous pole harmless, and permitting the transmission through it of a current of signal medical intensity; he localized it better by the direct application of the active pole, through the vagina, to the uterus, either in its cavity or into the fibroid deposits; and he brought it thoroughly under control by the exclusive use of the unipolar method, thus applying to the diseased uterus a continuous galvanic current of sufficient intensity and duration to produce the required effect. This application, generally inaccurately described as electrolytic, says DR. Apostoli, should be defined as a galvano-chemical cauterization—a cauterization purely chemical, with two successive and distinct effects developed in the course of the current: First, a tangible effect at the points of entry and exit of the current, which, according to the dose and duration, will be a chemical cauterization more or less severe (but not thermic), variable in conformity with the pole, and different in its character at the two poles. At the will of the operator this polar action may be monopolar or bipolar. Second, the effect resulting from the circulation of the current from one pole to the other, and therefore called intérpolar action; an action that follows every electrical application, setting up a subsequent process of disintegration of the morbid products through which it passes.

But what are the clinical and purely practical results of APOSTOLI'S method? Before going farther it must be said that the positive pole is the express remedy for hæmorrhagic fibroids, and the negative for non hæmorrhagic—the positive being a hæmostatic, and the negative producing congestion. If both in their secondary interstitial action induce a retrogression of the tumor, APOSTOLI believes that the negative has the greater potency in this respect. Further, if the negative pole be made to enter a fibroid deposit by a puncture, it will insure a more rapid diminution of the tumor; and the negative pole naturally a congester and but little hæmostatic, finally becomes markedly hæmostatic, and will arrest troublesome hæmorrhage after a certain time; an effect caused by the cutting off of the supplementary circulation, by the rapid atrophy due to the action of the negative current. For the use of galvano-puncture there are certain rules, that may be thus summarized: 1. Absolute and regular antiseptic irrigation of the vagina, before and after each operation. 2. Use as the puncturing instrument the small steel trocar or needle, and let the punctures be shallow, that is, not deeper than from 1 to 2 cm. 3. Make the punctures on the most prominent part of the fibroid; whenever possible in the posterior cul-de-sac. 4. Make the punctures without speculum. Slide the trocar through the celluloid sheath that protects the vagina, after having examined and chosen by touch the point where the puncture is to be made. 5. Ascertain the seat of any pulsation, so as to avoid wounding an important vessel. 6. In case of unusual hæmorrhage immediately dilate the vagina with an expanding speculum, and if necessary put on pressure forceps to the bleeding point.

In answering the question as to the anatomical and clinical results, as regards the material changes it may be affirmed, says APOSTOLI, that every fibroid tumor submitted to this treatment, sometimes after so short a time as one month, but certainly when the treatment is fully carried out, will undergo a manifest reduction appreciable by the touch and demonstrable by internal measurement. The further diminution of the tumor, which continues for some months, varying in amount from a fifth to one-half of the original volume, is generally associated with a coincident, and equal accumulation of subcutaneous adipose tissue on the abdominal walls. The regression of the tumor is not only apparent during the time of active treatment, but goes on continuously after it has been suspended, and is the persistent proof of the enduring influence of the electrical operations. Simultaneous with the decrease of the bulk of the tumor occurs the liberation of tumor from its local attachments. The tumor, that at the beginning of treatment was immovable, is made to change its position more and more as the absorption of the enveloping tissue advances. And with the retrogression of the tumor is a tendency of the tumor to separate itself from the uterus, to become more distinctly subperitoneal, to detach its mass from the uterine wall, and to assume more of a pedunculated form. The clinical are not less striking than the anatomical results. APOSTOLI generalizes the extent and importance of these results, by saying that 95 times out of 100 they comprise the suppression of all the miseries constituting the fibroidal symptomatology, which may be thus categorically summarized: hemorrhages, the troubles of menstruation, dysmenorrhœa, amenorrhœa, nervous disturbances, the direct pains in the growth itself and from the mechanical pressure, and the harassing series of reflex actions. And while this therapeutical resource carries us so far as the sensible reduction of the fibroid tumors, and not to their total absorption, yet their complete removal may be anticipated, with a complete restoration of health. The greater number of the women that persist in the necessary treat-

ment are not only cured, but remain well. In some of his early cases APOSTOLI found an apparently absolute intolerance to high intensities of current, and he abandoned the method in these cases; at present he would simply chloroform the patients, and operate to the fullest extent. And in regard to such cases he lays down the following rule: No operator should admit the failure of intra-uterine galvano-cauterization before having had recourse to the galvano-punctures, which we must enforce either with or without anæsthesia.

From July, 1882, to July, 1887, APOSTOLI made 5,201 applications of the continuous galvanic current, for the following affections: Fibroids of the uterus—polypi; entire or partial hypertrophies of the uterus; subinvolutions; acute and chronic metritis and endometritis; ulcerations of the cervix; peri-uterine inflammations (perimetritis, parametritis, cellulitis, phlegmons); ovaralgia; ovaritis and peri-ovaritis; salpingitis; ovarian and tubular cysts at an early age; atresia; and hæmatocele. The 5,201 operations were made on 403 patients (this number does not include the patients on whom faradism was used). Of this number he lost two patients, the responsibility for which he takes upon himself, us well as of ten phlegmons that he either excited or aggravated; and in speaking of these he takes occasion to warn against careless use of the method, especially of the negative pole when there is any trace of peri-uterine inflammation present. "You must feel your way, testing the susceptibility you have to work upon by two or three preliminary operations, in which you give doses so feeble that they only serve to enlighten you, and to habituate the patient, so as to lead on safely to the use of higher intensities."—*Journal Am. Med. Ass'n., Jany.* 14, 1888.

HYPNOTICS.—"Hypnotism" is merely a new-fangled name for the mesmeric or magnetic sleep, and means simply slumber. The physiologists think of those under the influence of hypnotism as "electro-biologized," but the condition is nothing more nor less than that mesmeric state which some persons have the power of inducing by a subtle force nobody understands. But the well-sounding term "hypnotism" is circulated as the germ of a new idea. Hypnotics, as every medical man knows, are drugs which promote sleep, but are so widely different in their concomitant action that they may not be prescribed at random. For the relief of pain that causes dangerous insomnia, opium or morphine is the best agent, its unpleasant after-effects being diminished by combining it with belladonna or atropia, which combination will also relieve dyspnœa. A mixture of one of the bromides, atropia, hyoscyamus, and chloral hydrate will also be found beneficial for the insomnia accompanying pain. In severe lung affections, opium should be avoided. In any case, the prolonged use of opium is almost always followed by impairment of digestion, causing liver complications, loss of appetite, and a host of evils.

Morphine, the valuable alkaloid derived from opium, is more prompt in its action than opium *per se.* It is best given hypodermically before bedtime when sleep is most easily secured. Codeia is another valuable hypnotic, of which the doses are larger than those of opium, but varying according to the individual. The drug must be used with care, however, as it is capable of producing death from convulsions.

Large doses of hyoscyamus will induce sleep, but when used alone it produces unpleasant symptoms. It is combined with other hypnotics, especially when a heart stimulant is required. The derivative hyoscyamine may be given hypodermically in very small doses with the effect of crude henbane. The hydro-bromate of hyoscine is the salt of an alkaloid derived from hyoscyamus and is very powerful, $\frac{1}{200}$th of a grain giving decided effects. This is an excellent remedy in acute delirious mania, melancholia, insomnia following interference with the opium habit, restlessness accompanying chronic mental disease, etc. Begin with not more than $\frac{1}{120}$th of a grain and use the drug with great caution.

Chloral hydrate produces sleep which resembles that of nature, and has none of the disagreeable effects of opium or morphine. It is purely a soporific, however. When anodyne effects are desired, opium should be combined with it. This combination is more effectual than either taken separately. Chloral should never be given alone where there is heart trouble, as it weakens cardiac action; it should be combined in such cases with hyoscyamus or cannabis indica. It will be found very beneficial in delirium tremens, and Bright's disease where insomnia and restlessness ensue. For inducing sleep and controlling the spasms of lockjaw, it is invaluable. The use of it may be followed by skin blotches, bloating of the limbs, bed-sores, and feeble-mindedness. It is disagreeable to taste, but so pleasant in its effect that a morbid appetite for it is easily created. This craving may be cured more easily than the opium habit. Chloral should not be given in the presence of stomach irritation, as it will be rejected before absorption. Chloral hydrate is the best antidote for an overdose of strychnine, to be given after the poison has been gotten rid of.

Butylchloral hydrate (croton chloral hydrate) should be given in smaller doses than the foregoing. It possesses some anodyne properties which ordinary chloral has not. It is a good remedy for sick-headache and facial neuralgia which are not reached by ordinary anodynes and hypnotics. It has no weakening effect on the heart, and hence is used in cases of cardiac disease.

The bromides of potassium, sodium, ammonium, calcium, and lithium have some hypnotic power, the bromide of potassium being best known and most used. It depresses the heart, however, and lowers the spirits. Bromide of ammonium has a very disagreeable taste, and, after continued use, causes a skin eruption. Bromide of lithium is the most soluble and most powerful of all, but also most expensive. The bromides are not properly direct hypnotics, and may, therefore, be used with advantage in combination with morphine and chloral. They are, however, effectual in the control of convulsive action, especially if two or three are combined.

Paraldehyde has no anodyne properties, but is an efficient hypnotic and has no disagreeable after-effects. Double the dose of chloral is given, but the drug is always diluted on ac-

count of its very acrid taste. It does not affect the heart or respiration, but is generally disagreeable on account of its taste.

Urethran has a neutral effect on heart and respiration, half the dose of chloral being given. It is not unpleasant, and has no bad after-effect.

Hypnone is not an anodyne, but a powerful sleep-producer. It has no effect on the heart or respiration, but may cause subsequent headache, without nausea, however. Dose, three to four mm. dissolved in ether and given in a capsule.

Musk may be given as a hypnotic in cases of nervous exhaustion, delirium tremens, and for insomnia following fevers and acute diseases. Sumbul root (*Ferula sumbul*) will act like musk in similar cases. Hop pillows induce some persons to sleep either through the imagination or by virtue of the lupuline in the hops. Lupuline often has good effects on old people. Lactucarium, the dried milky juice of lettuce, in large doses will sometimes induce sleep. In simple wakefulness, gelsemium (yellow jasmine) may serve, but is powerless in acute insomnia. Ale or beer taken before retiring, is often a sleep-producer. This is better for the old than for the young.

Warmth often has a hypnotic effect, a warm bath being very efficacious. The wet sheet-pack is also good, sometimes when all other devices fail.—*Med. Register*, Jan. 12, 1888.

THE TRUE PLACE OF MILK IN THE TREATMENT OF DIABETES MELLITUS.—The very emphatic declaration of DR. AUSTIN FLINT, JR., in the Medical News of July 9, 1887, as to the harmfulness of milk in the treatment of diabetes mellitus seems to call for some reply from those who have been in the habit of regarding it with greater favor, and as I have published statements which distinctly commend its use under circumstances where DR. FLINT apparently directly condemns it, it appears not inappropriate that I should come forward and explain.

In the first place, I am not aware that any one, except DR. DONKIN, claims that milk is a specific for diabetes. My experience thoroughly sustains that of DR. FLINT, that "the so-called specifics for diabetes have little if any effect." Nor do I believe that a specific remedy for diabetes is likely to be discovered while its pathology is so ill determined as at present. There is reason to believe that we are able to influence the quantity of glucose in the urine of a given case by more than one drug. Thus, opium, and especially its alkaloid codeine, is well known to have this effect. In fact, codeine is by far the most active drug in this respect known to me. The bromide of arsenic, in the shape of Clemen's or Gilleford's solution, undoubtedly is influential. Ergot I have more than once seen reduce the quantity of sugar and urine. Salicylate of sodium in the hands of competent observers has been similarly credited. Finally, I have reason to believe, although my experience has as yet been too limited to justify any positive conclusion, that the treatment of lithium carbonate and sodium arseniate, recently announced by MARTINEAU, but really originating with the late PROF. ROUGET, may act similarly. Yet I am free to say that none of these remedies in my hands has ever cured a case, and I can cordially confirm DR. FLINT in the view that by far the most efficient treatment has been the dietetic.

And it is as a dietetic measure that I use milk, and always *skim milk*, in the beginning of treatment. It has happened to me time and again that glucose has completely disappeared from the urine and the quantity of the latter been rendered normal within a week after instituting the skim-milk treatment, and this, too, in cases where an antidiabetic diet, from which all kinds of bread were excluded, had failed to produce the same effect. On the other hand, it has happened to me, and I have now such a case, in which the use of milk without any drug was promptly followed by a reduction in the amount of glucose, which was not, however, permanent. The patient is an adult, male, aged thirty-nine years. The case is quite an acute one, in which the symptoms had set in but six weeks before he consulted me; at that time his urine contained fully eight per cent. of sugar. I immediately ordered him on an exclusive skim-milk diet. He himself much preferred buttermilk, and as I thought the treatment would be essentially the same I permitted it. Under this treatment the sugar rapidly declined, until at the end of twenty days it amounted to but 0.9 of 1 per cent.

It is, nevertheless, true, that unskimmed milk, so long as the disease continues, is a diet which fails to produce the results of skimmed. It has, however, happened to me that the use of unskimmed milk is attended by a reduction in the amount of urine and sugar contained therein, especially if it be gradually substituted for the unskimmed.

It is true that DR. FLINT in his sweeping declaration does not draw any line between the effect of skimmed and unskimmed milk, and it may be that his conclusions are based upon the use of unskimmed milk only. To me it is quite inexplicable how any one who has tried the skim-milk diet at all, should have come to a different conclusion from so many others, as well as myself.

Note.—Since the above was written the continued use of the lithium carbonate and sodium arseniate solution has satisfied me that it is fully as efficient as Clemen's solution of bromide of arsenic, although far from having the specific effect claimed by MARTINEAU. It should be remembered, however, that MARTINEAU says the remedy is especially useful in cases with a history of arthritic symptoms, "either articular or in the form of biliary or urinary lithiasis." I do not think attention has been called to this by others who have referred to this treatment.—JAMES TYSON, M.D., *Ept. Pract. Med. and Surg.*

THE RADICAL CURE OF VARICOCELE.—I have been engaged for more than three years past in a continuous effort to perfect the operation for the radical cure of varicocele, and to simplify it. My efforts have been made known, and the stages of progress set forth, in two articles in the Medical Record (February 20, 1886, and September 18, 1886), in which articles the use of various needles has been advocated. I have not changed the method materially, and still find it most simple to do what I suppose every one, from all time, has done who has used a straight needle in a handle—namely,

transfix from before backward, partly withdraw the empty needle, carry it to the other side of the veins, and again cause it to emerge at the point of original posterior puncture. I sometimes tie all the veins found large, passing one ligature to the outer side of the vas deferens, one on its inner side, at the same sitting, thus seeming to include the entire cord except the vas deferens. I have never seen atrophy or other evil result follow this very thorough ligation.

The point upon which I lay great stress is thorough antiseptic external irrigation, and the forcible tearing away of the dartos from the point of posterior puncture by violent traction upon the silk while the scrotum is held firm.

I use only very large twisted silk at the present date, and I prepare it simply by boiling it and then placing it in a bottle containing common alcohol. At the moment of operation I dip it and the needle in a bichloride solution in water, 1 to 1,000. I have no doubt hot water would do as well. I tie with all my strength with silk I cannot break. I have known the operation to fail in other hands for lack of using enough muscle in making the first knot. Other points in detail of the operation need not be described.

I have ceased counting my operations, which must number now near or more than fifty. I have never seen a drop of pus. My first operations with catgut were failures. One gentleman wrote me that a little pus formed in his scrotum after the use of catgut. I did not see it. It was long after the operation, and he was in a neighboring city.

In another case the attending physician informed me that a number of drops of bloody serum oozed for a day or two from one of the punctures.

I have inspected cases many months after the silk had been applied, and still been able to feel the little lump, very small and insensitive, about the veins. Whether the silk is absorbed finally, or remains encapsulated, I do not know. I have never seen an operation fail of success since I began to use silk, now more than eighteen months ago. My last case remained in his room only two days and a half.

But the above statements are only incidental: My object in writing the present note is to introduce to the profession what I consider to be a perfect needle for the performance of this operation. I have used all others in the market, and constructed half a dozen myself. All are defective save the one I now present, and that, I believe, is perfect for its purpose. It is constructed upon the plan of the Reverdin needle—that is, the eye is made to open and shut by a mechanism in the handle.

Last winter, DR. MAGNIN had a curved Reverdin needle, and my attention was called to it by DR. S. ALEXANDER. I had one made straight by MR. FORD, and tried it, but disliked it because the eye would sometimes open during the manipulations of the point within the scrotum—and the slit would catch a bit of connective tissue, an accident which absolutely interfered with all future subcutaneous work. It therefore occurred to me to have a spring fitted which would keep the eye constantly shut. This has perfected the instrument, and MR. FORD has made the parts so that they may all be taken out and dried after each use of the instrument, by simply moving back the band upon the handle and lifting out the plate which covers the spring. The needle is introduced charged with silk, the eye is opened, and the silk taken out; the eye closes itself by the spring; then the naked needle is passed around the vessels and emerges at the posterior puncture. The eye is opened, and the silk slipped in; the eye shuts itself, and the charged needle is rapidly withdrawn.—E. L. KEYES, M. D., *in Medical Record.*

THE TREATMENT OF BILIOUSNESS.—According to the Boston Medical and Surgical Journal the treatment of biliousness is prophylactic, alimentary, and medicinal. Prophylaxis is concerned with avoidance of all the known causes, whether of a toxic, malarial, or alimentary character. A plain diet, of bread, milk, oatmeal, vegetables, and fruits, with lean meat or fresh fish in moderation, and abstinence from alcoholic stimulants, seems to be the ideal fare for the biliously predisposed. This kind of diet is especially applicable for hot weather, when albuminoids are apt to clog the portal system, and pastries are an abomination, and when a boiled schrode, a little chicken or a mutton broth, with bread and stewed fruits, will make a more healthful meal than the more sumptuous fare of a modern fashionable dining saloon. Exercise in the open air is of recognized utility in promoting oxidation and elimination, enhancing the digestive and assimilative processes, and lightening the burdens of the liver. Moreover, exercise (whether by rowing, horseback-riding, gardening, or walking) hinders absorption of bile by the hepatic venous radicals, and promotes the passage of that fluid into the duodenum, through the increased compression exerted on the liver by the diaphragm and abdominal muscles; this is in accordance with a recognized physiological law. The victim of an acute bilious attack will generally get righted in a few days by, first, abstinence from all food, then a diet of porridge and milk, or skimmed milk alone, and a very gradual return to solid food, which for several days should be restricted to toast, a little lean meat, or broiled fish, with some succulent vegetables or ripe fruit. As for medicines, saline aperients, such as sulphate of soda, Epsom or Rochelle salts in full doses in the morning, or the now fashionable tumblerful of Hunyadi Janos will generally suffice to clear the *primæ viæ;* the latter has especially a reputation for evacuating bile. The striking relief obtained by free bilious evacuations has often been remarked, and the veteran transgressor resorts to his blue pill or podophyllin with every recurrence of his malady. Of late euonymin has come much into use as a cholagogue. HARLEY recommends to persons who seem to have a more than usual tendency to biliousness, traceable to sluggish biliary secretion, and where there seems also to be defective nerve action, small doses of nux-vomica or strychnia after their meals. This may be combined with belladonna and aloes, as in the aloin, strychnia, and belladonna pill. The bilious person is generally constipated, hence such a pill has a special utility. FOTHERGILL'S pill of ipecac, capsicum, and pil. aloes et myrrh, has done good service is such cases. Nitro-

muriatic acid and taraxacum have a reputation which is probably not altogether built on imaginary results. But bilious dyspeptics, while they should be attentive to the functions of eliminations (and doubtless the ancient predilection for purgatives has been justified by modern scientific research, which finds in intestinal septicæmias and alkaloids of putrefaction many of the evils formerly attributed to peccant humors and atrabiliary disorders), should aim especially to be good hygienists and learn to live right; but this is counsel which everybody gives and nobody takes.

THE TREATMENT OF RETAINED PLACENTA AT THE ROTUNDA HOSPITAL, DUBLIN.—In the *Practitioner* for December, 1887, DR. LANE describes the method pursued at the Rotunda Maternity as follows: When the placenta is adherent I believe the proper treatment is to pass the hand or fingers into the uterus and detach it, although I have been informed that some continental obstetricians allow the placenta in such cases to remain for even a month after delivery (unless there is hemorrhage or symptoms of septicæmia), especially in the cases where the patients have not come to their full time. I consider, however, that if the operator's hands be not perfectly aseptic, this is the most dangerous of all operations met with in midwifery practice, except the Cæsarean section. It has been recommeded by some authorities to keep the fingers inside the membranes during the operation, but there are many cases met with where, owing to the friable nature of the placenta, necessitating the removal of small pieces at a time, this is impossible. Should there be any septic infection about the hand, and especially about the nails, the usual seat of such poison, I failed to see how such a patient can escape becoming infected; for it is analogous to vaccination, except that virulent poison is substituted for healthy lymph, and with unfortunately greater likelihood of its taking effect, owing to the prolonged contact. The uterus, except where it has been already douched out with the hope of getting the placenta away, as I have already mentioned, is always douched with antiseptic solution prior to introducing the hand. Although the left hand is recommended by many as being smaller and corresponding more with the pelvic curve, the right hand is the one generally used, for, the patient being in the obstetrical position usual in this country, the fundus of the uterus can be better and more easily supported by the left hand (the operator standing at the patient's back). Nor can an assistant, no matter how experienced he may be, support the uterus so satisfactorily as the operator himself, who knows the exact part of the uterus requiring pressure so as to bring that particular part of the uterine wall nearer to the introduced hand, and who is able to remove it to some other part the moment required.

An anæsthetic, usually chloroform, is nearly always administered, in order that, if necessary, the hand may be passed a second time where doubt exists whether all the placental tissue has been detached; for if the patient be perfectly conscious of what is being done, the operator must be very resolute to be able to withstand her solicitation not to pass the hand a second time, and I consider that once the hand is introduced, the operation should be persevered in to entire completion. When satisfied on this point, the uterus should be again douched out with antiseptic solution.

THE CURABILITY OF DIABETES.—BOUCHARDAT defines diabetes as a disease in which the urine contains constantly a notable proportion of sugar. Most writers add to this the statement that the condition is accompanied with excessive thirst, excessive or perverted appetite, progressive emaciation, muscular weakness, and languor. Glycosuria is a name once used simply to indicate that saccharine urine was being passed. Of late, however, attempts have been made to make it stand for a more or less distinct disorder in which the amount of sugar is small and the presence of it in the urine not constant. It is not possible as yet to separate diabetes and glycosuria sharply, but, for convenience, the distinction suggested by BOULOUMIE (L'Union Médicale, November 10, 1887), is a serviceable one. According to this writer, in diabetes, with or without azoturia, the sugar does not disappear from the urine when starches and sugars are withheld from the patient. In simple glycosuria, with or without azoturia, the sugar disappears when starches and sugars are withheld. The time which it takes to cause sugar to disappear in glycosuria, so-called, by proper diet is from three to seven days.

In determining the effectiveness of drugs in the treatment of diabetes, the test of withholding sugars and starches must first be made. Judged by such tests, the alleged curative properties of such drugs as bromide of arsenic, ergot, opium, the salicylates, jambul, etc., would probably be estimated at a much lower value. The selection of cases no doubt affects greatly the statistics of those who have written upon the prognosis of this disease. CANTAIN says that diabetes is curable provided the treatment be begun early and continued for a long time. PROF. BERUSSI says that he has never seen a case cured, and SEEGEN, among four hundred patients, never found one who was so much improved that he could eat carbohyrates like other people. MR. MARTINEAU, in a recent communication recommending lithiated arsenic, claimed to have cured 67 out of 70 cases! FRERICHS, discussing the treatment of diabetes (four hundred patients), says that cure is rare. He himself mentions 12 cures, and 250 deaths. ANDRAL, among 84 cases, found that the sugar disappeared in a very small number of cases, and LECORCHI gives about the same opinion.

There can be very little doubt that well-established diabetes is almost, if not entirely, incurable. It may, however, run a very long course, and this is especially the case in diabetes of nervous origin and in those forms which occur during the latter periods of life.—*Med. Record*, Jan. 21, 1888.

THE THERAPEUTIC USE OF RAW MEAT.—DUJARDIN-BEAUMETZ and YVON.—In regard to nutritious quality, goat-flesh and horse-flesh occupy the first rank. The degree of digestibility of meat depends upon its state of cohesiveness; the flesh of the younger is more di-

gestible than that of the old animal. The digestibility of those kinds of meat is the greater which can be eaten in the raw, or pulverized state, or as conserve.

It is best to eat only mutton in the raw state, because beef may easily contain the cysticercus of tænia. It may be administered in various ways, and is prepared by scraping with a knife or finely mincing it. Among the culinary preparations are especially to be noted: beaten egg with raw meat; artichoke purée or spinage with the same; soup consisting of 25 to 50 parts of flesh pulp and tapioca.

To the pharmaceutical preparations belong especially the conserves, the emulsions and the marmalades.

Meat conserve, after ADRIAN:

Filet du bœuf, 60.00.
Sea-salt, 1.00.
Frozen fruit, 500.00.

Emulsion, after YVON:

Raw meat, 50.00.
Sweet almonds, 15.00.
Bitter almonds, 1.00.
Sugar, 16.00.

Mix them up in a mortar, and add the necessary amount of water to make an emulsion.

Meat marmalade, after LAILLER:

Raw meat in fine pulp, 100.00.
Pulverized sugar, 40.00.
Wine (fine quality), 20.00.
Tincture of cinnamon, 3.00.

The most important indications for these preparations occur in patients suffering from consumption, chronic diarrhœa and the like.

Pulverized meat, when dried at a temperature below 100° C., may easily be reduced to a powder. In order to know that this powder is good, it is necessary that under the microscope the muscular fibres may still be seen. If, however, many bacteria are present it must be regarded as harmful. Pulverized meat is best administered mixed with nutrient materials.—*Riforma Medica*, No 247, 1887; *Internat. Klin. Rundshau.*

IODOL IN SURGERY AMONG CHILDREN.—DEMME is quoted by the Archives of Pediatrics for November, 1887, as using iodol as follows, among children:

1. As a powder to be sprinkled over deep wounds, for example, after scraping away tuberculous deposits.
2. Upon ulcerative necrotic surfaces, such as may be produced by extensive burns.
3. As a powder to be sprinkled over fresh incised or lacerated wounds.

The wounds are subsequently covered with a dressing of boric lint, over which is a layer of cotton-wool. The dressing is renewed every two to five days, and it has usually been found that the secretions are odorless, and the granulations healthy in appearance. Compared with iodoform, it does not become encrusted with the secretions like the latter, which is sometimes detached with difficulty, and may excite hemorrhage. In removing the iodol from a wound it is best to wash it away with a one-per-cent. solution of carbolic acid, or a two-per-cent. solution of boric acid. Tampons of cotton or of borated lint charged with oil of iodol or iodolated glycerin in the proportion of one of iodol to two or four glycerin may be used to fill cavities, which have been opened and scraped. Iodolated gauze of the same percentage strength and similarly prepared as iodoform gauze may be used as a substitute for the latter. Under the use of this gauze the granulation process progresses more satisfactorily than with the use of the oil of iodol or the iodolated glycerin. No symptoms of poisoning nor any harmful effects upon the digestive organs were observed from the use of the iodol. In two cases of extensive burns in which a large quantity of the iodolated glycerin was used, iodine was recovered from the urine one and a half hours after its use was begun. The local antiseptic action of the iodol appears to consist in the permanent separation of a very small quantity of iodine at the surface of application. Before or after absorption more or less of it probably combines with certain alkalies and albuminoids. It is not proper to lose sight of the possibility that the system may undergo toxic effects from iodol in the same way that it does from iodoform.

SALOL, BETHOL, AND NAPHTHOL.—Gospodin Vilents of Dorpat has published an account of some researches he has been making, with a view of determining the therapeutic value, from a veterinary point of view, of some new drugs. The salols, he finds, lower the temperature in healthy animals, but in large doses salol gives rise to toxic symptoms. This class of bodies, too, does not behave alike with different species of animals. Bethol, which is naphtholol-salicylic-ether-naphthol, $C_6H_4 . OH . COO . C_{10}H_7$, and which is prepared by the action of oxychloride of phosphorus on a mixture of β-naphthol and salicylate of soda at a high temperature, appears to have a beneficial action in intestinal affections. For injection into the bladder or uterus salol is preferable. Bethol does not appear to have much power of destroying parasites (entozoa) or bacteria. The author thinks that the salols will displace salicylic acid for internal use. The former bodies have, however, a peculiarly toxic action on cats, and they must evidently be prescribed in general with caution. Naphthol in its crude state always contains carbolic acid; pure β-naphthol dilates the vessels in frogs, and acts as a muscle rather than as a nerve poison. It increases the peristaltic action of the bowels when administered by the mouth or subcutaneously. It seems to have anthelmintic and cathartic properties.

NITRITE OF AMYL IN AFTER-PAINS AND DYSMENORRHŒA.—MR. F. W. KENDLE, of South Molton, reports the case of a lady who complained to him, the first day after delivery, of excruciating after-pains, which she declared were worse than any she had experienced during the labor. The womb was found firmly contracted; loss was slight; and no clots larger than beans had been passed. As several hours must necessarily have elapsed before any medicine could have been sent her, MR. KENDLE broke a couple of nitrite of amyl capsules (four grains in each) into a smelling-bottle, and directed the patient to take two or three deep in-

halations when she felt a pain coming on. The effect was simply magical; the pains were immediately relieved, and shortly ceased altogether, the patient being soon able to take some refreshing sleep. She made an excellent recovery. He has since tried the same remedy in two other cases of less severity with similar results. He has also found the drug invaluable in the sickness of pregnancy, and in obstinate cases of dysmenorrhœa. Inhalation seems to be more certain and lasting than the internal exhibition of the drug. He strongly recommends this as a simple and efficacious plan of treatment.—*Lancet.—Nashville Jnl. Med. and Surg.* Dec., 1887.

INTESTINAL ANTISEPSIS IN TYPHOID FEVER. BOUCHARD has found the following formulæ useful in typhoid fever:

An iodoform mixture.

Iodoform., gr. 9.
Æther. sulphuric., ʒ 17½.
Carbo. vegetab. pulver., ʒ 50.

Mix, and after the ether has evaporated, add

Glycerin, ʒ 45.

Of this, a teaspoonful may be given every two hours in half a glass of lemonade.

Iodoform, in powder, may be given as follows:

Carbo. ligni pulv., ʒ 25.
Æther. sulphur., ʒ 17½.
Iodoform., gr. 15.

The iodoform must be dissolved in ether, and the charcoal added. Dose, a teaspoonful.

A salicylate of bismuth powder may be prepared as follows:

Carbon., ʒ 12½.
Sacchar., ʒ 6¼.
Naphthol., (*β*), gr. 40.
Bismuth salicylat., gr. 40.

M. To be taken during twenty-four hours.—*Le Bulletin Médical*, Dec. 7, 1887.

COCAINE IN GOUT.—DR. EDMUND GOLDMANN, of San Jose, California, writes us:

"I recently had an opportunity of treating a severe case of gout in which there was extensive swelling of the big toe, with cocaine, locally. I used a six-per-cent. solution, with the most gratifying results; the cyanotic appearance being diminished in a few hours, and the excruciating pain subsided in twenty minutes, almost entirely. I have seen no published account of a similar case so treated. Perhaps you may have read of some such; if not, you can speak of this one for the benefit of your many readers.

"The solution of cocaine was applied by means of a soft C. H. pencil (about every five minutes), on the painful member, until pain was relieved. Patient could not bear the slightest pressure or weight on the part, else I should have applied cotton pledgets saturated with the solution, in preference to painting with the C. H. pencil."

It does look as if, in cocaine, we have found the greatest boon to suffering man; its uses are innumerable.—*Daniel's Texas Medical Jour.*, Dec., 1887.

THE TREATMENT OF HEADACHE CAUSED BY CHRONIC PHARYNGITIS.—VERGELY recommends the following application to the throat, by a camel's hair pencil, followed by a gargle of warm salt water:

Glycerin.,
Tinc. iodin.,
Aquæ destil, ää ♏ 75,
Potass. iodid.,
Cocain. hydrochlor., ää gr. 7½.

In general treatment quinine, in 8-grain doses, with 30 grains of potassium bromide, was given. Aconitine or morphine may also be employed.

When anæmia is present the following pill may be used to advantage:

Ferri oxalat, gr. 1½,
Ext. rhei, gr ⅙,
Ext. nucis vom., gr. $\frac{1}{20}$.

—*Revue Générale de Clinique et de Thérapeutique*, December 22, 1887.

HYOSCIN IN PARALYSIS AGITANS.—PROF. W. ERB speaks most highly of the usefulness of hyoscin in this form of paralysis. He has observed no positive cures obtained by its use but marked palliation of the symptoms. In one case after long use a kind of remission was observed. The others were much helped. For some hours the patients were able to move their limbs freely and felt much more comfortable. The trembling was removed completely in some cases and in others almost so for several hours or for a quarter or half day. The usual dose was 2 to 3 milligrams; these small doses often also caused sufficiently marked by-effects to prevent their being increased. The improvement in the general condition was so much greater than the discomfort of the side-effects that the latter were not objected to by the patients. The by-effects usually noticed where the medicine acted with unusual power or was used in a larger dose than was readily borne, were generally a feeling of weakness, drowsiness, heat about the face, dryness in the throat, some dizziness, uncertainty of vision and heaviness of speech.—*Therapeutische Monatshefte.*

GRINDELIA ROBUSTA IN PERTUSSIS.—The Paris Médical publishes a communication from M. BILHAUT (read at the Société de Thérapeutique) on the action of grindelia robusta in whooping-cough. The grindelia robusta is a perennial plant indigenous to Mexico and California. The active principle is a resinous substance possessing antispasmodic properties, and at the same time stimulating the mucous membrane. It is efficacious in bronchitis, and also in chronic cystitis. It is eliminated by the kidneys. The tincture, fluid extract, or syrup of grindelia robusta, in cases of whooping-cough, stops vomiting and the other painful symptoms, and transform severe, whooping-cough into a mild affection of short duration. The dose is one gramme to four grammes a day for adults. For children the tincture is preferable. M. BILHAUT cites ten successful cases.—*British Medical Journal.—Med. Record*, Jan. 21, 1888.

THE TIME FOR THE ADMINISTRATION OF CERTAIN MEDICINES.—Iodine and the iodides should be given on an empty stomach. If given during digestion the acids and starch alter and weaken their action. Acids, as a rule, should be given between meals. Acids given before meals check the excessive secretion of the acids of the gastric juice. Irritating and poisonous drugs, such as salts of arsenic, copper, zinc and iron, should be given directly after meals. Oxide and nitrate of silver should be given after the process of digestion is ended; if given during or close after meals, the chemicals destroy or impair their action. Potassium permanganate also, should not be given until the process of digestion is ended; inasmuch as organic matter decomposes it and renders it inert. The active principle of the gastric juice is impaired and rendered inert by corrosive sublimate, tannin and pure alcohol; hence they should be given at the close of digestion. Malt extracts, cod liver oil, the phosphates, etc., should be given with or directly after food.—SIR ROBERT CHRISTISON, in the *Med. Waif*, Jan., 1888.

HYDROCHLORATE OF APOMORPHINE IN DRY COUGH.—This drug has been extensively tried by DR. STOCQUART, of Brussels, as a remedy for certain kinds of cough, and he speaks highly of its value. The kind of cough in which it has proved most successful is a distressing and frequent hacking, unattended with expectoration, or with exceedingly difficult expectoration. The improvement of the patient's condition is usually effected in a few days. The drug is, as a rule, well borne, although a few individuals manifest a special susceptibility to its action, and rarely, nausea, colic, and diarrhœa result from its employment. The dose is a minute one, only about one-twentieth grain of this alkaloid being given in water in the twenty-four hours. As the solution rapidly alters by keeping, it is advised to prevent its decomposition by the addition of a few drops of hydrochloric acid, which does not interfere with the therapeutic effects.—*Medical Record*—*Weekly Med. Review*, Jan. 21, 1888.

ERGOTIN IN SUPPOSITORIES IN THE TREATMENT OF UTERINE FIBROMATA.—BELL has found the following suppository convenient in administering ergotin for uterine fibromata:

Ergotin, gr. 4 to 8.
Ol. theobrom., gr. 25.
Vaselin., gr. 5.

To be used per rectum.

Tnese suppositories are also convenient in menorrhagia and metritis.—*Gazette de Gynécologie*, Dec. 1, 1887.

A NEW PREPARATION OF IRON.—CHICAUDARD has prepared the sulphate of the protoxide of iron and ammonia as follows:

He dissolved separately 139 parts of sulphate of iron and 66 of sulphate of ammonia in as little water as possible, at 104° F. He mixed the solution in a glass vessel, and added a few drops of sulphuric acid and stirred well with a glass rod.

The salt precipitates in small, greenish-white crystals. It is soluble to the extent of seventeen or fifteen per cent. in water. CHICAUDARD regards this salt of iron as a new and convenient one for physician's use.—*Journal Médecine*, Dec. 4, 1887.

FOR INHALATION IN PHTHISIS.—FILLEAU and PETIT have found a most useful preparation of inhalation:

Acid. carbolic, gr. 30.
Essent. terebinth., ʒ 12½.
Essent. picis, ʒ 5.
Eucalyptol. (Merck), ʒ 7½.
Chloroform, gtt. 5.

Inhalations of five minutes each are advised, four or six times daily.—*Revue de Therapeutique*, December 1, 1887.

A TEST FOR SEWER GAS.—The presence of this poisonous gas in a room may be detected as follows: Saturate unglazed paper with a solution of one troy ounce of pure acetate of lead in eight fluid ounces of rain water; let it partially dry, then expose in the room suspected of containing sewer gas. The presence of this gas in any considerable quantity soon blackens the test paper.

A LAXATIVE GASTRIC TONIC.—BARDET has used to advantage:

Ext. fluid. cascara sagrad, ʒ 5.
Tinct. nucis vom., ♏ 30.
Aquæ destil., ʒ 28¾.
Syrup. simpl., ʒ 3¼.

M. Sig.—Dose, a teaspoonful.—*Journal de Médecine*, Dec. 18, 1887.

EPHEDRINE—A NEW MYDRIATIC ALKALOID.—Chlorhydrate of Ephedrine is a new mydriatic alkaloid obtained from Ephedra vulgaris by M. KINNOSSUKE MINRA. It has been employed in a solution ten times more concentrated than homatropine, but it is much less costly. It does not paralyze the accommodation for near vision.—*Lancet.*

THE ABORTIVE TREATMENT OF BUBOES.—MANNINO has treated twenty-seven cases of bubo successfully by injecting them every two days with a very small amount of one per cent. solution of corrosive sublimate. A few drops of pus are aspirated at first, and replaced by a few drops of sublimate solution.—*Wiener medizinische Presse*, No. 47, 1887.

PICHI.—NIVIERE and LIOTARD have examined the fabiana imbricata, which has been used in the treatment of the urinary organs and the liver, and found that it contains no alkaloid, and that the therapeutic effects are owing to a glucoside which resembles esculin.—*Journ. Pharm. Chim.*—*Pharm. Record*, Jan. 15, 1888.

The Medical Age.

Vol. VI. DETROIT, FEB. 25, 1888. No. 4.

Original Articles.

EPILEPSY.*

BY J. J. MULHERON, M. D., DETROIT, MICH.

Gentlemen:—The subject (epilepsy) which you selected at our last meeting as that on which I should prepare a paper, is one on which you will scarcely expect me to shed any additional light to that, imperfect though it be, which has already been thrown on it. You will not expect me to even skim over the broad surface which the subject presents. I shall, I am sure, quite satisfy your expectations if I but succeed in refreshing your memories on a few points connected with the disease which you may, haply, in the multitude of your professional distractions, have forgotten, or your recollection of which may have grown rusty. Rust, I may parenthetically remark, is very prone to bedim the polish given by the *alma mater*, and it is one of the most commendable functions of the medical society to remove, or keep from forming, this deleterious oxide.

Epilepsy is one of the, unfortunately too numerous, opprobria of medicine. Its causation, both remote and immediate, is unknown, we confess our ignorance of its pathology by classing it as a functional disease, and we are only measurably successful with its therapeutics. We should, however, be untrue to our high calling did these facts lessen our interest in the disease, or, indeed, fail to stimulate our desire to penetrate the mystery which envelopes it.

Epilepsy is a recurrent paroxymal neurosis, characterized by loss of consciousness and convulsions of a combined tonic and clonic nature. For a long time this loss of consciousness was held to be due to congestion of the cerebral centres. An accumulation of facts has, however, justified the theory that both this symptom and the convulsions themselves are due to the opposite condition, or anæmia. Copious and sudden hemorrhage, for instance, is well known to be followed by convulsions simulating very closely those of epilepsy. KUSSMAUL and TENNER, also, ligatured or compressed the carotids and subclavians of a hundred rabbits, and in every instance in which the blood supply to the brain was cut off convulsions occurred. During the height of the convulsion, moreover, if the ligature were removed the convulsion would cease immediately. The symptoms in these cases were essentially similar to those of epilepsy in man, even to the dilated, insensible pupil and the tonic and clonic spasms. Compression of the carotids in man, with incomplete deprivation of the blood supply, causes paleness of the face, contracted followed by dilated pupils, slow, deep and sighing respiration, giddiness staggering and unconsciousness.

In further support of the theory of cerebral anæmia we have the fact that convulsions are almost constant accompaniments of acute apnœa or sudden suffocation. In these cases the impeded transit of blood through the lungs causes cerebral anæmia. It has been supposed that the convulsions under these circumstances are due to the circulation of non-oxygenated blood in the brain. It is obvious, however, as pointed out by DR. GEORGE JOHNSON, that if the presence of black blood in the brain occupied this causal relation, the approach of convulsions would be retarded, and not accelerated by compression of the arteries which supply the brain. Black blood, moreover, in so far as it is deficient in oxygen, is equivalent to no blood. The face turns pale with the onset of the convulsions and the ophthalmoscope has revealed anæmia of the retina, which derives its blood supply directly from the internal carotid artery. An analysis of the various theories, therefore, leads us to regard as the most tenable that which regards the seizure as due to spasmodic contraction of the arteries conveying the blood-supply to the brain. This contraction is due to a "nerve storm" but when we seek to discover the condition antecedent to this storm we find ourselves hopelessly at sea.

Heredity plays an important part in the case of epileptics. In a large proportion of those presenting, either epilepsy or one of the paroxymal neuroses is discoverable in the ancestry of the subject. Habits of intemperance have been alleged as causes of the attacks, but the fact that a drunkard or his child is an epileptic furnishes equally strong evidence in support of the assumption that the inclination to intemperance is itself a sign of the neurotic tendency. Sexual excesses may by a similar process of reasoning be regarded as either a cause or an effect of epileysy. There is no doubt,

* A paper read before the Wayne County Medical Society.

however, that the genital organs and their corresponding nervous centres, in the immature youth especially, are kept in a condition of habitual excitement by the practice of masturbation, and this vice is, probably, a more active excitant to epilepsy than the more modern writers seem willing to concede. The direct exciting causes of attack, referred to by various authors, are numerous, and among them we have mentioned decayed teeth, intestinal worms, painful cicatrices, injuries to the brain, etc., the removal of which has often been followed by a non-recurrence of the seizures. Certainly the removal of such possible exciting causes should be a part of the treatment in each case.

The division of the seizures into epilepsy minor and epilepsy major, or *petit mal* and *haut mal*, according to their severity, need not be dwelt on, but reference should be made to the exceptional forms of the disease, which cannot properly be classed under either of the usual heads. A young man, eighteen years of age, consulted me for relief from the habit of wetting the bed. On awaking about once a fortnight he discovered that he had unconsciously voided his bladder during the night. This condition had continued about a year. I prescribed, somewhat empirically, the tincture of the chloride of iron and tincture of cantharides in small doses. This being of no benefit, was, after a reasonable time, discontinued, and the list of remedies for enuresis was, during a somewhat extended course of treatment, quite exhausted without avail. One afternoon, after he had been under observation for over six months, he was seized in the waiting-room of my office with an attack of *petit mal*. The cause of his nocturnal enuresis had now some light thrown on it, and close questioning revealed the fact that the seizure which I had witnessed was the fifth of which he was himself conscious of having suffered. The treatment was now changed to BROWN-SEQUARD'S formula for epilepsy, * and after continuing this for upwards of three months the wetting of the bed ceased. It is but just to state that the habit of masturbation of which the young man was guilty was discontinued with the exhibition of the bromides. This case is mentioned as an illustration of the necessity of inquiring more closely than is the custom into the etiology of enuresis. It also illustrates the masked nature which the seizures of epilepsy may assume, and emphasizes the necessity of a close scrutiny into the nature of persistent spasmodic seizures of whatever nature, such as tic-douloureux, angina pectoris, etc. There is reason for believing that these latter affections are largely epileptiform in their nature. The "insane impulse," too, has latterly come to play an important part in criminal jurisprudence, and although the plea is, unquestionably, often set up to defeat the ends of justice, there is little doubt that the epileptic seizure is liable to, and occasionally does take the form of delirium in which the victim becomes possessed of an impulse to violence. The epileptic is for this reason a dangerous member of society and should not be suffered to roam at large without surveillance.

Epilepsy is apt to be confounded with other forms of spasmodic neurosis, and more especially with that form of hysteria known as hystero-epilepsy. It is quite essential, from a practical point of view that this error should not occur, and I herewith present the following tabulated arrangement of the points of difference in their diagnosis:

EPILEPSY.	HYSTERO-EPILEPSY.
Paleness or lividity of countenance; shriek with onset of seizure: froth from mouth; grinding of teeth and often biting of tongue; insensibility of pupils to light.	Countenance either unaltered or flushed; no shriek; no froth from mouth; no grinding of teeth or biting of tongue; pupils react readily.
Complete insensibility.	Patient sensible to external impressions.
Aura, which is of short duration.	No aura, but globus hystericus which may continue for one or two days.
Patient falls without effort to save himself from injury.	Patient is never injured by his fall.
Countenance distorted during seizure.	Features unchanged.
Occurs frequently at night.	Rarely occurs at night.
Convulsions more marked on one side than the other and more tonic than clonic.	Convulsions affect both sides equally and are more clonic than tonic.
Attacks usually of short duration—two to five minutes.	Attacks generally last much longer.
Bears no relation to the disturbances of the genital functions.	Generally traceable to some uterine or ovarian disturbance.

Uræmic convulsions simulate epileptic seizures in some respects, but the points in the differential diagnosis above enumerated, will be sufficient to enable one to distinguish true epilepsy from any other affection.

The epileptic seizure is usually ushered in by the aura, which appears in a great variety of forms, as the sensation of a breeze blowing over the surface of the body a flash of light, a peculiar odor, a rumbling sound, etc., or it may take the form of the affliction of some severe physical injury, as a blow on the head with a

* ℞ Iodide of potassium, ʒj.
Bromide of potassium, ʒi.
Bromide of ammonium, ʒiiss.
Bicarbonate of potash, ℈ij.
Infusion of columbo, ℥vj.
Mix.
Sig.—A teaspoonful before each meal and three teaspoonfuls at bedtime, with a little water.

hammer. In a minority of cases this merciful warning does not occur, the patient falling suddenly, evidently as a result of the profound coma with which he is seized, absolutely without premonition. A peculiar shriek or yell generally accompanies the fall, the absence of modulation of the sound indicating a spasm of the vocal cords. The spasm sometimes, however, attacks the respiratory muscles first, and thus the characteristic shriek is prevented. Immediately on falling all control of the voluntary muscles is lost and a tonic spasm of tetanic rigidity seizes them. It is usually more marked on one side of the body than the other, and lasts for from one to two minutes. The clonic contractions then supervene and with each expiration froth is emitted from the mouth. The muscles of the jaws are involved in these contractions and the teeth are ground together and the tongue, or cheeks, are frequently caught between them and sevely bitten. The urine not infrequently and the semen and feces occasionally, are voided during the seizure. The colonic contractions last from one to three minutes, the latter limit being rarely if ever exceeded, although those who may witness a seizure and do not actually time the attack are generally very positive that it lasts much longer. The irides are insensible to light, and the subsidence of the attack is attended by contraction of the previously dilated pupils.

Epilepsy is one of the most uncertain of diseases, both as to its duration, and as to the length of the intermissions between the attacks. In some cases the seizures are determined by some indiscretion, but in most the explosion is traceable to no cause that is discoverable.

Treatment. What we know of the nature of epilepsy, its etiology or pathology, is of little or no assistance to us in its therapeutics. The first thing to be done on undertaking the treatment of a case is to make deep scrutiny for possibly existent points of peripheral irritation. These discovered, should be removed. In my own experience such scrutiny, in the case of an abandoned woman, who was an epileptic for many years, revealed a scar in the sole of the foot which was the seat of the aura, an intense pain attacking it a few seconds before each seizure. This I excised and although the attacks had for years occurred at intervals of not longer than two weeks, she did not have one in the three months following the operation during which she remained under my observation. When the aura proceeds from a localized superficial spot it would seem to be good practice to cut down upon it with a view to removing any irritant which may be discovered, or to dividing or stretching any nerve which may seem to be involved. The irritation caused by an overloaded stomach or by an accumulation in the intestine may determine a seizure in those predisposed. A little girl, ten years of age, had had frequent seizures and had been freely drugged. I learned on taking charge of the case that she was an inordinate eater, and would overload her stomach with indigestible food. I gave orders for her food to be restricted in quantity and ordered cascara sagrada for the constipation from which she suffered. Without any further treatment she has, at this writing (six months after I first saw her), had no attack, although in the previous six months she had had several.

The list of remedies which have been found of service in epilepsy is a very short one, and even such as are regarded with favor are very unsatisfactory when their exhibition is not accompanied by proper hygiene and regulation of the functions of the alimentary canal. The following drugs, mentioned in the order of their importance, are those which have been selected from their supposed value: Bromide of potassium, belladonna, arsenic, nitrate of silver and sulphate of zinc. The nitrate of amyl is valuable for the relief of the seizure, and when the aura gives sufficient warning its inhalation may ward off a threatened attack. The epileptic, like him who is subject to attacks of angina pectoris, should for this purpose carry with him a few nitrite of amyl pearls, one of which, containing from three to five drops, may be broken in his handkerchief and inhaled when the necessity arises. It is scarcely necessary to dwell on the method of exhibiting the other drugs enumerated, further than to remark that they should be pressed to the full tolerance of the system. The danger of permanent discoloration from nitrate of silver should, of course, be always borne in mind. The bromide of potassium should be continued long after it has been thought to have been successful in curing the affection. It should be given persistently and without intermission, forming, indeed, a part of the daily meals for at least two years, in even apparently successful cases, and should not be given for a less time before discontinuing it as useless. Bromism, when threatened, may be prevented by an occasional cathartic. Brown-Sequard's formula is a very eligible and effective one.

MEDICAL PAUPERS.

BY CHAS. R. CULLEN, M. D., HANOVER COUNTY (P. O., RICHMOND), VIRGINIA.

Not many years ago a neighboring physician died in abject poverty. He had practiced his profession for fifty years, and, doubtless, had done more charity practice than any physician in the State. The motives of his life were to follow his Lord and Master as devotedly as he knew how, and refused his medical services to

no one. White or black—he attended them all alike. Through summer's heat and winter's cold, he pursued the object of his life, trusting to his final reward in the other world. Occasionally he collected his medical accounts, but only when dire necessity drove him to do it, against the inclinations of his philanthropic nature. Waiting monthly and annually for spontaneous offers to settle his bills, he waited in vain. The few persons who paid him could not support his numerous family; and while his debtors were enjoying themselves, his life was misspent in trying to keep the wolf from the door. He lived and died wanting the ordinary comforts and conveniences of life. During his whole life he had no means to purchase medical books, or journals, or instruments, or costly medicines; and consequently he pursued the practice of his college life, with no opportunities for mental improvement. As he lived in a neghborhood where the people read but little, and knew comparatively nothing of the great advances in medical practice, his reputation stood high, and his busy life was devoted to well-meant efforts to alleviate human suffering and to prolong the natural limits of human life.

On another side of my neighborhood lived a physician of excellent attainments, and who was well-read in his profession. He, too, had an extensive practice; but unlike the other physician just referred to, he endeavored to collect his medical accounts. For a while his services were well paid, but after the war (like hosts of country practitioners) his services were paid by a few persons, but by the mass of people with only promises to pay—many of them insincere and seldom kept. Necessity drove him to the city of Richmond, where he lived but a few months and was buried at the expense of the Medical Faculty. Just before his death he informed me that many of his neighbors would not pay their medical accounts while he was living in the country, but after he had moved to Richmond, they offered to pay double the usual charge per visit to attend their families, and to pay cash for each visit.

In another part of my county are living younger practitioners, with famlies, whose support comes from other sources than their professional receipts. Last year they admitted that they received only three hundred dollars for their whole year's labors.

All over the State are similar examples of lives devoted to the relief of humanity, and with similar results. Many of these practitioners are striving with all the energy of life to support their families from their medical calling, but their receipts are insufficient, with the greatest economy and self-denial. Many of these practitioners would do credit to their profession, they would read more of medical works, and would contribute their mite to the progressive steps of medical knowledge, were they paid for their services the moderate charges of country practitioners. This seldom happens. Some of them live upon the property bequeathed to them until finally consumed.

Before the war things were different. There were few persons who did not pay something; but now the number of nonpayers has largely increased. When the negroes were slaves doctors were speedily summoned to attend them, and their bills, however large, were always paid. The mortality of the race was much less than it has been since the war. They have lost the watchful care of their owners, whose pecuniary interests alone prompted them to furnish the best medical attendance to be had. The attachments of the families owning these slaves were much greater than were ever accorded them by Northern people, and they aided the attending physician all they could in personal attention and in providing delicacies for the sick. Soon after the war the negroes generally paid their medical bills in work, or by orders on their employers. But year after year increases the number of those who will not pay, and now hardly one negro in ten will voluntarily meet his obligations to his family physician. While nearly the whole race are church members, the payment of debts does not enter into their religion; and the consequence is that physicians have lost a large part of their labors by attending them.

To this large percentage of medical unpaid practice must also be added a great portion of the whites. Some of these persons have no property and have large families, with but little means to feed and clothe them. This portion of the community the philanthropic physician attends cheerfully, and furnishes medicine, gratuitously. To this class of persons I have devoted a large part of my life, and have given away thousands of dollars in medical attendance. But there is another portion of the community who spend their money as fast as they make it, and many of them for alcoholic liquors. These persons seldom pay anybody who will credit them—be it the merchant or doctor; and the burden has fallen upon the doctors—and a grievous one it is. There is also another part of the community who have property. With even one horse they make more money than many physicians with one horse, and many of these people employ all means to prevent the doctor's bills being paid. Often they pay a lawyer a larger sum to prevent the payment of their medical bills than the amount due the doctor. To lessen the burdens of this class, with the consent of nearly all the neighboring physicians, I reduced the obstetrical fee from $20.00 to $10.00, but they are no more inclined to pay this bill than when it was double.

Now the question comes up to all country doctors: How must these difficulties be met and removed? Must they who pay their bills pay more than they ought, to make up the losses from all sources? This is the way merchants of all kinds transact their business. The margin of profit must be sufficiently large to pay for bad debts; and very often this is too small, and the merchants fail in business from too much credit. This is what is being done by the doctors all over the land. By giving long periods of time to settle medical accounts the sense of gratitude wears away, and the obligation to pay is hardly considered binding, by too many people. Many of them reason this way: that if the doctor has more property than they have, or is living comfortably, or, in their opinion, does not need the money, then medical bills can be put off for a more convenient season, which seldom comes. They are very liberal in their promises to pay—hardly ever deny the justice of a bill, and if, after paying other debts, they should have any money left, or might find some in the road, or have it given them, or get it some other way than they expect, they *might* pay the doctor. They come to look upon the doctor's bill as a part of halfway charity or benevolence on their part, which should entitle them to unusual forbearance. If there are other doctors convenient they make a change, and in turn defraud the new doctors as they did the old. I exchanged lists of the bills with some of my neighboring physicians and found two-thirds of the same persons owing all the doctors around them.

How are these losses to be met? Physicians, and other people who pay their debts, have to pay more for credit than cash buyers; *i. e.*, they are paying other people's debts. This is wrong in principle, but how is it to be avoided under the present custom of doctors and the laws of the State? To make a change for the better requires the medical fraternity to unite more strongly in their societies, and to see that persons who are able to pay should be compelled to do it.

Under the present laws of the State this is difficult to accomplish; and the only way to amend them is to obtain the union of all who do a credit business in petitioning the Legislature to extend the Statute of Limitations to ten years, instead of five as at present. There are many people who wait until the expiration of five years to avoid paying their bills. As soon as a convention for revising the Constitution of the State is called, the crediting part of the community should endeavor to secure the payment of debts by removing the exemption from the statutes which operate to the benefit of the idle and the knaves all over the State.

The honest man and debt-payer does not want exemption. His debts are paid, without compulsion; but those who do not pay, require such a law to keep them from paying their debts that they may live on other people's labors. The laws of the State are made for the debtor class, and it is time they should be changed. The creditors should form a society and uphold it everywhere in the support of office-seekers only who will use their influence to abolish the exemption laws of the State. When this takes place, merchants and doctors, and all other persons who do a credit business, would not lose such a large percentage of their business. They could live from their own industry, and have an opportunity of bequeathing some property to their families, which few of them now are able to do. Under the present system, many of them are like the minister who was told that his salary was raised, to which he objected. He said that it took all of his time to collect it, and a vote to increase it would require more physical strength than he possessed. It now costs the physician five or ten visits to collect a bill—and very often of some few dollars. Like the sailors of Ulysses who took bags of wind for sacks of treasure, the poor doctors take promises to pay—verbal and written; and often can do nothing with them against the exemption laws of the State—made to protect the debtor at the expense of the creditor. Let the physicians use all their influence to change these laws, and endeavor to secure the payment of their bills. They should lift up the standard of honesty, pay their own debts, and strive to return to the paths of their fathers, who certainly surpassed the moderns in their sacred regard to pay debts.

While science and art have combined to advance, the practice of paying debts, and medical bills in particular, has not improved; and this subject demands the attention of the preacher, as well as of the doctor and the merchant, in upholding honesty as a fundamental principle. The old heathen Greeks and Romans had a clearer practical knowledge of honesty than numbers of Christians, so-called. Socrates spent his life in teaching the difference between honesty and dishonesty, truth and falsehood, and other moral principles. Antonius wrote: "Put it out of the power of truth to give you an ill character; and if anybody reports you not to be on honest man, let your practice give him the lie; and to make all sure you should resolve to live no longer than you can live honestly, for it is better to be nothing than a knave." If sudden death should come to the dishonest, the population of the earth would be decimated everywhere.

The French author Montaigue writes: "I always feel a pleasure in paying my debts, because I discharge my shoulders of a wearisome load, and of an image of slavery;" and Franklin adds: "oftener of real slavery, for a man in debt is not a freeman"

Solon, 560 B. C., writes:

> "The flow of riches, though desired,
> Life's real goods if well acquired;
> Unjustly never let me gain,
> Lest vengeance follow in their train."

The life of country physicians is a hard one at best, and to be deliberately plundered by persons always promising to pay and never doing it, should be changed for the better by the laws of the land and the requirements of the doctors themselves.

We have homilies in public and in private, from all sources, about the philanthropy and self-denial of the medical profession. There is a time for flattery and a time for plain talk. According to the old saying, "fine words butter no parsnips, nor put meal in the meal-tub, nor money in the pocket, nor contentment into the soul." We want payment for our services, and we should see to it, that if a man profess to serve the Lord we like to see him do it by paying his medical bills as when he "hollers Hallelujah." "Deeds are fruits; words are but leaves," and it is useless to waste life attending people able but unwilling to pay their doctors. Attending such persons is but kindness thrown away upon ingratitude.

It is said that kindnesses increase by sowing, like grain; but if the soil is destitute, the result is no crop worth the reaping and cost of cultivation. This has been the case with hundreds in my practice as in the experience of others.

In conclusion, I reiterate again that the necessities of our country practitioners should force them into united efforts to produce decidedly important reforms, without waiting another month; and to commence the coming year with resolutions to be paid for services rendered by all who have the ability to do so, by notes and mortgages if necessary. The drift downwards to poverty must be stopped, or the profession will be abandoned to illiterates and knaves. Virginia is fast becoming the Paradise of paupers and knaves.

To the young men of the profession, this matter should not be postponed; and if no change for the better can be effected, it would be better for hundreds of them to leave the State for their own good, to escape the fate of many of the profession—living and dying Medical Paupers.

NOTES ON CATARRH AND ITS EFFECTS ON THE SYSTEM.

BY C. R. PONTIUS, M. D., FREMONT, OHIO.

I believe that catarrhal diseases, both primary and secondary (those at first local and afterwards becoming systemic or constitutional in their effects), are more frequently met with to-day than any other class of diseases. As the mucous membrane is found lining all the cavities that have an external communication, such as the nose, throat, mouth, lungs, stomach bladder, kidneys, intestines, eyelids, vagina, womb, etc., the field for the action of catarrh is at once seen to be very broad. And as this tissue covers such a large expanse of surface, and comes in contact with such a variety of influences, as well as substances of various forms and power, in some special regions of the body, it is certainly most liable to disease.

Nearly every one has some form of catarrhal disease, and if it happens to be nasal catarrh he gives up in despair, with the idea deeply imbedded and firmly rooted in his mind that there is no help for him, and that he must abide by the inevitable. This almost universal conception of the nature of the affection is due to the fact that it has not been studied by the average physician as it should be. A result of this negligence is a failure in the matter of the therapeutics, and knowledge of the intimate nature of the disease. Instead of investigating, and diagnosticating the different stages and forms of this very prevalent affection, and prescribing intelligent treatment for each individual case, the stereotyped advice is to "use salt water."

I believe all cases of nasal catarrh can be relieved and a large majority cured. This belief is based on the history of cases treated by scientific means and by competent men.

A catarrh is a watery, mucous or purulent discharge from any mucous mbembrane, and is at first a local disease. If the poisonous discharge remains in contact with a highly sensitive and inflamed membrane it will be absorbed, to a greater or less extent, by the capillaries. If certain medicines in solution are thrown into the nasal cavities by a spray apparatus, the systemic effect will be observed through their being absorbed. If medicines are thus readily and rapidly taken up and carried through the entire system to produce their peculiar physiological effect, is it not probable that this poisonous catarrhal discharge not only causes trouble locally by irritating the parts, but also through being absorbed? Absorption of catarrhal poison from different regions, I believe, often causes a sallow color, an appearance of anæmia, yellowish spots on the face, a languid feeling, irritability and in some cases the appearance of "biliousness." These marked symptoms do not immediately appear, but they occur after the blood has become charged with the poisonous material, and the emunctories, the liver, intestines and kidneys, become clogged and weakened in their struggle of months and, perhaps, years, to rid the system of this foreign material.

I desire to call attention, briefly, to some of the different regions which are the most commonly affected. I will first speak of that form of catarrh which the average person knows

most about as well as that kind for which he spends most money for patent medicines, with the positive assurance that the remedy presented for his personal consideration will cure him without a doubt. I refer to nasal catarrh.

Naturally we have two good straight capacious air-passages leading from the nostrils to the back part of the nose, at which point they unite and form the posterior nares, which in turn, immediately communicate with the upper part of the pharynx. These cavities are separated in a normal condition by a straight, bony-cartilaginous septum. The nasal cavities are lined by a mucous membrane that is highly vascular, which is a provision of nature for warming the atmosphere which we breathe as it passes through these cavities on its way to the lungs. The tissue which enters into the formation of these parts is seldom if ever found in a strictly healthy condition in this climate.

Repeated colds cause the highly vascular mucous membrane lining these cavities to become congested, swollen, inflamed and eventually permanently enlarged, or hypertrophied. These enlargements greatly encroach upon the breathing capacity of these cavities in many cases, and do not permit a sufficient amount of of atmosphere to pass through to supply the demands of the system.

The nasal septum is not always, and, in fact, is seldom the straight thin partition alluded to above; it is usually deflected to one side or the other. This malformation may be either congenital or the result of fracture at some time. As a result of this deflection or bulging the cavity into which it bulges is deprived of just that amount of free breathing space. This deflection may be so great as to close one nasal cavity entirely. Bony growths or spurs on the septum are quite common and also cause obstruction in proportion to their size.

Tumors are often found in the nose, their host never suspecting their presence if they are not large, yet sometimes they fill an entire cavity and may be of great annoyance by interfering with respiration, as well as causing much loss of blood in some cases.

There are but few persons who are not troubled with one or more of the above named abnormalities, which are sufficient within themselves to cause catarrh of a serious nature.

If the nasal tract is obstructed in any way and free respiration can not take place by the natural channel, the person is compelled to breathe through the mouth continually. The air is then not properly warmed, as it is in passing through the nasal cavities, and strikes the throat in a cold condition and will undoubtedly cause throat disease in the course of time, to say nothing about the effect the untempered cold air has on those very important and delicate organs, the lungs.

In my opinion there is a more serious result which follows any of the above-named obstructions to easy and unimpaired respiration, viz., obstruction to proper drainage forward of the secretion of the mucous membrane lining these cavities.

If one or both of the nasal passages are partially or completely closed up by one or more of the causes already named, drainage forward, the natural course, can not take place. The mucus accumulates, and where does it go? There is but one other direction, and that is backward through the posterior nares, and it may trickle down the walls of the throat into the larynx. If a large quantity leaves the nares suddenly as when the head is thrown back, there is a cold sensation produced in the throat. If the mucus is not expectorated it may be, and often is, swallowed. This mucus, the result of catarrh, is not a normal secretion, but is discharged as the result of disease and is very offensive and poisonous to the system. It bathes the mucous surfaces and capillary network of the nose and throat, and acts as a foreign body to these parts, and undoubtedly is absorbed and carried through the system in many instances.

The etiquette of society prohibits us from expectorating this morbid secretion, and, nine times out of ten, it is swallowed and carried to the stomach. The stomach was made to receive and digest food and not to act as a receptable for depraved mucus which should be lodged in the spittoon and properly disposed of. It is a foreign substance to this important organ which it irritates by its presence, and this cause is liable to produce catarrh of this viscus, with a refusal on its part to digest food as well as it did before, and system thus suffers for want of proper nutrition.

When one is suffering from nasal catarrh the throat usually participates in the morbid process. These parts are then sensitive, and are in just the proper condition to absorb or take up anything that may come in contact with them. Why may not the bacillus tuberculosis, the alleged cause of consumption, be admitted through this channel? This is a conjecture which is unsettled at the present time.

It looks reasonable to me that poison absorbed in the manner indicated is often the cause of many aches and pains, which never can be fully and permanently relieved until the poison is removed from the blood, and its ingress is debarred in the future by curing and putting in a healthy condition the membrane through which it obtained admission. I have seen the entire system become much more vigorous, an injured stomach regain its former activity, by curing a chronic throat difficulty of a catarrhal nature. The same has been observed by curing catarrh of the stomach and generative organs. These organs have inti-

mate nervous relations, and when one is the true seat of disease the functions of the other organs are materially and often seriously interfered with.

I have often thought that many cases of neuralgia were the result of the blood becoming impoverished in the manner suggested. If neuralgia is a "prayer of the nerves for healthy blood," the grounds for supplication in the condition hinted at are certainly often very tangible.

The systemic irritation, which any one of the catarrhal conditions mentioned is prone to cause, may be very great, and through sympathetic action may cause serious functional disturbances of various important organs, among which the organs concerned in digestion are very prominent. If nutrition is interfered with the weakest part of the system will suffer first, it matters not whether it is the lungs, nervous or muscular system.

ANTISEPTIC MIDWIFERY.

BY M. F. CUPP, M. D., METAMORA, IND.

In No. 1, current volume of the MEDICAL AGE, may be found an article with the above heading. The writer of the article in question takes in his view of the subject, as it appears to me, to say the least, an equivocal position.

For myself, it must be confessed that the exact points aimed at by DR. WARD are not clearly perceptible. Does he mean to be understood as saying that a physician can have a large, successful business with a medical education peculiar to himself, and whose ability is all but invisible? And, again, when he asserts that "It flattens a man out like a blow from a pile-driver to find after upwards of 30 years' practice, that he has been almost criminally wrong in not having known and done his duty, but yet is comforted by a reflection touching a phenomenally successful career in obstetrical practice," would he have one to conclude that antiseptics are unnecessary in *any* obstetrical case?

Concerning the use of antisepsis in *all* cases of confinement, I must confess that I have not thought it a duty. Still, I have been led to believe that there are cases in which strict antiseptic treatment, as well as antiseptic precautions, are demanded under the light afforded by "scientific research." It would be assuring to learn that I had entertained this idea unnecessarily. It would also save me a deal of trouble and extra care. I should like to be able to feel, were I to attend a case of labor consecutively to a case of erysipelas with discharge of pus, or other morbid secretion, should the woman have puerperal septicæmia afterwards, that I was entirely blameless in using no antiseptic precautions. DR. WARD states that he has repeatedly gone directly from a case of erysipelas or diphtheria to one of labor. Furthermore that he has participated in an autopsy from which he has proceeded to a woman in confinement, introduced his hand and forearm into the womb, without having first washed it, and lubricated it with some bland oil. Does he desire to be understood by country practitioners as advising, or approving, such a line of practice? I am at a loss whether to accept his statement following as sincere or ironical.

In order to assume a frame of mind appreciative of his paragraph on the portability of sufficient bichloride solution for a full disinfectant bath (in the presence of the family, where but one room is available), one must also call to mind the extraordinary difficulty which must attend the country doctor's carrying about with him his office, with accompanying books, drugs, instruments, "skeleton," and files of medical periodicals for fifteen or twenty years past. Further, the wearisome, distracting noise caused by the carpenter, as he arranges on one bare wall the necessary shelving to contain all this outfit, as its owner sits by the woman's bedside, with his left index finger *in loco*, while with his right hand he holds for perusal his favorite author on obstetrical subjects, looking up the "fine points" in his case, would disconcert the classic mind of his city *confrère*.

It would be an acquisition to me to learn what the exact effects upon the placenta would be from maintaining a "taut" condition of the cord in the management of the third stage of labor.

Once more, would he explain why it is that he does not believe in, and consequently does not practice, the thorough washing of his dirty hands with warm water and soap, and their subsequent protection from contact with both cold and dirt by means of a pair of gloves or mittens? In this latitude these articles are found to be absolutely essential, as is also frequent washing of the entire surface of the body. Are we to infer from the doctor's article that in this matter we have only been pandering to fashion's follies, or indulging in a useless time-consuming habit? Still another strange practice which seems to be in vogue up there about Laingsburg, Mich., and that is the dumping of the "baby" into its clothing without so much as greasing it to bring off the "Dutch cheese." It may be that nice, clean, non-infectious people, such as DR. W's patients appear to be, are not smeared with this stuff like most filthy little "Hoosiers" are when first they "come to town."

Dr. W. appears to lose his footing on the inutility (if he is advocating that) of antiseptic treatment in his remarks on "Ophthalmia Neonatorum," and actually recommends the employment of cleanliness as a preventive!

But then if we rightly interpret him he is excusable, as he "squirts" a little breast-milk on the cornea to counteract any deleterious effects possible from the previous cleansing.

But here another difficulty stares me in the face, and that is, what does he "squirt" on when there is a total absence of breast-milk—but, as usual, I forget that there appears to be a radical difference between women in Indiana and those of Dr. W.'s place, as regards their strict conformity with every known bent of human nature.

Lastly, I can only express my most profound astonishment on learning that Dr. W.'s patients never get an attack of urethritis (specific or non-specific), and are filled with wonder and admiration when I conceive of the Michigan women whose individual vaginæ are so pure and undefiled that one may "go his length" without haunting fear of any after-clap. To be sure, one may be now and then smuggling a leucorrhœa, but that innocent discharge would only serve in a moment of need as a convenient "lubricant," by no means to be interfered with!

A CASE OF ATHEROMA OF AORTA.

BY H. J. CHADWICK, M. D., HART, MICH.

W. J. SPUGG, aged 66, height six feet, weight 200 pounds, lymphatic temperament, comes from a long-lived ancestry. During the first twenty years of his life, after having arrived at the age of maturity, he worked at the various employments of shoe-making, traveling for a wholesale liquor house, and lumbering. For the past twenty years he has employed himself looking after his farms, and selling lumber, leading a very easy life.

About 15 years ago a cataract made its appearance on one eye. In a few years more one made its appearance on the other. These had grown so, up to two years ago, that he could go about but little without assistance, and consequently was confined to the house most of the time. One year ago he had one eye operated on with the result of restoring his vision, which enabled him to take distant journeys to visit friends. Everything seemed to be doing nicely with him up to two weeks ago, when, while seated in the hotel in company with others, smoking a cigar, he felt a strange, sick feeling pass over him. This he attributed to smoking a strong cigar. The door was thrown open and in a short time he was enabled to walk home. He noticed on defecating the fæces bore a very dark appearance, which he thought was caused by eating berries. This dark color continued for one week, the discharges becoming more frequent, when his wife became alarmed and sent for me. On examination I found the alvine evacuation very dark and of a jelly-like consistency. I informed my patient that he was losing blood from some place high up in the alimentary canal. He thought I must be mistaken, but took my prescription of ergot and laudanum. This was Nov. 22: Nov. 23 found the discharges from the bowels nearer their natural color; no fever; pulse from 85 to 90 per minute. On the night of Nov. 24, I was sent for, but the messenger was unable to find me. In the morning of the 25th I visited the patient and learned that during the night he had had a severe gush of blood from the throat. Unlike the discharge in hæmatemesis it was not discolored or ejected by the act of vomiting, but seemed to come in one forcible gush and then stop. Had it come from the lungs it would not have come with such force. Hence I think it must have come through the walls of the œsophagus from an aneurism existing in the aorta. After this gush of blood the patient was given small pieces of ice. He appeared weaker, but in good spirits, and seemed to regard the trouble as of no more importance than a "love-sick nose-bleed." I, however, regarded the trouble as fatal, and advised that his business be immediately adjusted. I had the patient remain quiet in bed and increased the ergot without the laudanum.

Nov. 26th, he felt well till about 9 A. M., when the circulation became more rapid, followed by nausea. This disturbance lasted two hours, after which he became cheerful again and circulation began to drop, so that 6 P. M. the pulse was 88. During the night the patient slept quite soundly, but awoke exhausted.

Nov. 27th, 9 A. M., all clear in mind; ate some breakfast, and was cheerful. At 10 A. M., nausea, which passed off in one hour. At 5 P. M., pulse 90, temperature normal, Gave ergot alternated with turpentine. I was called to the country and on my return at 10 P. M. learned that my patient had had another of those "terrible gushes of blood" from the throat. I found him unconscious, eyes glassy, pulse 120 per minute. Two local physicians had been called in my absence, and had injected hypodermically three drops of the fl. ext. veratrum viride.

Nov. 28th, 4 A. M., pulse 100, patient semi-comatose. At noon seems to grow brighter, but at 6 P. M. is delirious.

Nov. 29th.—Rested well throughout the night; took nourishment several times. At 8 A. M., pulse 90; 9 A. M., 100; 12 M., 94; 4 P. M., 90. at which it remained until 2 A. M., when it was 88.

Nov. 30, 7 A. M.—Pulse 86. As the bowels had not been moved for three days, I gave an enema, which brought away a discharge natural in quantity but of the color of tar, after which patient felt well and rested some. At 9 A. M., as his wife was feeding him toast and coffee, he rolled his eyes, fell back and the

third gush of blood occurred. The patient died in two minutes.

Post mortem.—Owing to the limited time at our disposal, a minute dissection of the aneurism was not made. The heart was sound in structure but about a third larger than normal; lungs normal; stomach normal. Placing my finger into the aorta and flexing it, the walls would crack like egg-shell. I exposed the mucous surface and found it honey-combed with little ulcerated spots that in many places had nearly eaten through the muscular coat. Here I thought I had found sufficient cause for aneurism. The stomach and duodenum were filled with blood.

PICHI IN HÆMATURIA RENALIS OF BRIGHT'S DISEASE.

BY GEORGE CHAFFEE, M. D., BLUE HILL, NEB.

On May 14, '87, I was called to see MR. S—, age 70, Englishman, merchant, of quite full habit. Found him suffering from hæmaturia, and urinating about every five minutes. Nearly one-fourth the amount passed was blood. I gave ergot, normal liquid, alternating with gallic acid. I then received a specimen of his urine, and upon analysis, of course found albumin in large quantities. Microscopically I found blood, epithelial, granular and waxy casts. On account of organic disease of the heart (which is shared by the coats of the arteries) the ergot was discontinued, but the gallic acid was kept up. Under this treatment the blood gradually disappeared from his urine, but the albumin and casts remained. The disease of the heart had existed for more than twenty years, without treatment, upon the advice of PROF. MOTT, of New York.

In July this patient took a trip to Minnesota. Returned in Sept. feeling much better. On October 22, he had a severe hæmorrhage which, on the 25th, threatened his life, when, either from the free use of the acid and ergot, or from diminished blood-pressure, the hæmorrhage again checked up, leaving the patient very much exhausted. The vital powers were supported by proper agents and on Nov. 10, upon the suggestion of PROF. A. H. SOWERS, of Gross Medical College, Denver, I gave a dose of blue mass, followed by a saline, and the following prescription.

℞ Potas. nitratis, ʒ ii,
Ext. fabianæ imbricatæ fl. ʒ i,
Aquæ dest, ʒ ss,
Syrupus, ad. ʒ iv.

M. S.—Teaspoonful every six hours.

Under the pichi treatment, a select diet, diluent and cooling drinks and rest, he improved. Was able to be up and around his room until Jan. 15, when he had a profuse hemorrhage lasting about 22 hours. The bladder was full of blood and the desire to void it was constant and urgent.

Patient lost about two quarts of blood. The urethra often became obstructed by clots. A No. 11 catheter was passed when necessary. The ergot and acid were again given, also morphine hypodermatically, and the system in general was supported.

Jan. 16. Patient objected to having the bladder washed out, and I simply left him the prescription containing pichi. His urine soon cleared up again, and he is now lying quite easy in bed.

On Feb. 4 an examination of his urine shows the following results:

Physical characters.—Amount, 800 c. c.; color, pale; muco sanguinous deposit.

Chemical characters.—Reaction, acid; sp. gr., 1008; albumin, small percent.

Microscopically (casts).—Epithelial, granular, waxy.

Although pichi is not recommended in organic disease of the kidneys, I sincerely believe that since Nov. 10 I have carried this patient along, and stayed the progress of his disease as well, if not better, with pichi than I could any other remedy with which I am acquainted. I will add, that my patient thinks pichi is a wonderful remedy.

Correspondence.

GONORRHŒA AND CONCEPTION.

Anent, the discussion of DR. GOODELL'S statement concerning the barrenness of women who have suffered from gonorrhœa, I conclude from facts in my possession that it is fairly entitled to be considered a rule, but a rule with many exceptions. As one of these exceptions I call to mind one in particular of six cases in which I have known women to conceive and bear children, who had previously suffered from severe gonorrhœa: A girl, 19 years old, had two lovers. The accepted one "knew her not," till after marriage. The other, strange as it may seem, laid his plans so well, that he gave her a violent gonorrhœa. The accepted and unsuspecting lover engaged me to attend her. A high fever and suppurating inguinal buboes gave her much pain and sorrow, and her doctor a fair bill. The wedding day had been set and was only six weeks distant. She had "missed" her menses once, and ere the happy day had arrived, had "missed" them just three times. All parties were anxious to observe the time appointed. There were many good reasons why the matter should be "hushed." I gave careful directions as to the use of syringe and antiseptics, in

lotions and vaginal suppositories, on the wedding night, and during the honeymoon, for I loved the man. He was honest and had paid the bill. The bride was able to go to the church at the time appointed. Evidently time and antiseptics, weakened the virus to a "mild culture," for when four weeks had passed a very mild urethritis had to be "explained" and cured. This was done to the young husband's entire satisfaction in a few days, though I had some misgivings as to just how I should turn the next corner, which evidently would be reached in about five months more.

It was a lovely moonlight night, in June; I was there. All faces were solemn and thoughtful. I had not yet got any light as to how I should "turn the corner." A sharp labor kept all busy. Soon a monstrosity was born, its limbs, clavicles, jaws and features proclaimed its nine months of development. It had an immense goitre, and a frightfully idiotic head. It showed some very faint signs of life, but not after a kind neighbor woman had placed it in a proper position between two pillows. The "corner" was easily "turned," so that love, contentment and happiness, continued to abide in that house, and still abide there, after eight years have passed. There also abide there two bright children, whose features, resemble those of the accepted lover. M.

ADRIAN, MICH.

SYZYGIUM JAMBOLANA IN DIABETES MELLITUS.

APOTHECARY VAN LEDDEN HULSEBOSCH, of Amsterdam, reports that under the influence of an infusion of Syzygium jambolana the quantity of glucose in patients' urine diminished from 3.55 per cent. to *traces* as shown by the following data:

1887.		
Jan. 29	3.55	per cent. glucose.
Feb. 1	2.9	" "
" 3	1.88	" "
" 6	2.5	" "
" 9	3.24	" "
" 10	1.09	" "
" 13	0.25	" "
" 19	0.46	" "
" 25	*traces.*	

I am bound to make a note, says Mr. V. L. H., of the fact that Mr. N. N. lived far from a quiet, regular life, and indulged often in excesses, not only in cibes, but in baccho and venere, so that I found on some days again 2 and 3 per cent. glucose in his urine, to be brought down back to *traces*, after a faithful use of his infusion of Syzygium jambolana. Infusion is to be preferred, because the bark contains much starch. I made in all 36 quantitative analyses for him, covering six months.

For another patient the author analyzed (Sept., 1887) urine containing 4.54 per cent. glucose, and after using daily the Syzygium jambolana, three times a day a teacupful, a 1.10 infusion, for one month (October 1887), the quantity of glucose was brought to 0.74 per cent., and after another month (November 1887) to *traces*. V. L. H. acknowledges that two cases are not sufficient proof, but invites co-operation.

For literature about Syzygium jambolana, V. L. H. recommends DR. C. L. VANDERBURG, Degeneesheer, in Ned. Indie. Referent would recommend to American readers the Therap. Gazette, page 830, 1887; Druggists' Bulletin, 1887, page 184; Medical Age, 1887, page 338, on Jambul (Syzygium jambolana, D. C.)

Syzygium jambolana grows wild and cultivated in the Malayan Archipelago.

J. B. N.

DETROIT, Feb. 6, 1888.

CHEKEN IN PNEUMONIA.

I was called to Seafield, the next station east of this place, to see a young man, aged 22. He had been exposed in a severe storm, and on awaking the next morning it was with great difficulty that he could breathe, and suffered from intense pain over the right lung. When I arrived (the afternoon of the same day) I found the temperature 103¼°, pulse 115, respiration hurried and difficult.

A careful examination revealed invasion of the upper lobe of the right lung. I decided I had a case of acute pneumonia, and determined to try cheken.

I ordered a 20-grain dose of calomel to be taken at once, to be followed by cheken in doses of 20 drops every three hours. Also ordered sponging with tepid salt water and a mustard plaster over the chest. The next morning my patient expressed himself as feeling like a new man and in three days was out. No other treatment was used. The cheken was continued two and a half days.

After the evening of the second day there was no return of the high temperature and the patient's countenance was expressive of ease and comfort, and rapid return to health.

It may be that in cheken we have found a remedy that will abort pneumonia, but, of course, a single case cannot do more than suggesta trial of the drug in other cases.

F. A. GRANT, M. D.

WOLCOTT, IND.

A SHOT-GUN PRESCRIPTION.

I have in my possession a copy of a prescription sent to a drug store by a regular (?) physician who claims to be a graduate of one of the oldest eastern institutions. Here it is:

℞ Sulphur,
Brimstone, ää 2½ oz.
Cream tartar, 1 teaspoonful.
Powder,
Shott, ää ½ oz.

M. S. Make into an ointment by heating 12 hours and apply, and heat in at bed time.

Dr. ———

The druggist into whose hands this unique specimen came, mixed together the first three ingredients and directed the owner of the prescription to get the remaining ingredients at a hardware store. The chirography is sufficiently plain to leave no reasonable doubt that this compound was intended and yet, astonishing as it may seem to our cultured eastern colleagues, from whom medical knowledge emanates as heat and light do from our sun, this fellow is a graduate of that ancient and revered institution known as Darmouth. Further comment is unnecessary.

A. J. ROSENBERRY, M. D.

WAUSAN, WIS.

EUPHORBIA PILULIFERA IN SPASMODIC CROUP.

I had a patient in the person of a boy three years old suffering with spasmodic croup. After using the usual remedies without success, and by this time he was nearly dead, I thought of a sample of fluid extract euphorbia pilulifera which had sent me, and it occurred to me to try it. It was evening, and I at once gave him a teaspoonful. He had little more than swallowed it when he fell back asleep, and slept until morning. I then directed a teaspoonful to be given whenever the spasm made its appearance, and I never did have occasion to repeat the dose until the disease made its appearance again, which was every month or so during a period of three years. One dose was always sufficient to stop the spasms and give entire relief. I directed a four ounce bottle to be kept in the house at all times. The child is now six years old and as healthy as can be.

P. E. THOMAS, M. D.,

LITTLE ROCK, ARK.

SYRUP TRIFOLIUM CO. AS AN ALTERATIVE.

I have prescribed Syrup Trifolium Comp. several times in prescription, as from its pleasant taste I found no difficulty in its use with fastidious patients. It is too early for me to realize much benefit from its use, excepting in one case, a child of 8 years, complaining of pain in the limbs, which shifted to the arms, causing her a good deal of annoyance, as well as keeping her from school. In this case I gave your Syr. Trifol. Comp , one part, simple syrup two parts, teaspoonful four time a day, and the father reported, after a few days use, the disappearance of the symptoms spoken of.

J. F. FORCE, M. D.

MINNEAPOLIS. MINN.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., FEB. 25, 1888.

Editorial.

THE WOMB AND NERVES.

The impression is very wide-spread, and is by no means wholly confined to the laity, that the womb is a sort of nervous centre from which proceed nearly if not quite all of the nervous disorders with which its unfortunate possessor may be afflicted. Doubtless that very aggressive class of specialists yclept gynæcologists, who have brought themselves into such prominence within the past two decades, are very largely responsible for this impression. The importance with which they have vested their vocation has brought even the common practitioner to regard the organ which is the object of their attacks, as the centre around which the whole woman revolves. Of course there is no warrant in the nervous connections of the womb and its appendages for thus regarding it, but that matters not. The error is not the only one which in the very face of reason, has long been dominant. It has, however, in all probability, been more productive of injury to women than any other, and if the tale of the cuttings, and parings, and stitchings, and cauterizations, and removals which have been practiced on the uterus, tubes and ovaries for the relief of nervous disturbances, could be but half told, the record would be appalling. The signs of the times, however, are encouraging, and the indications are that the womb will soon lose its prominence in the etiology of the neuroses. DR. BATTEY, who may be said to have originated the removal of the ovaries for the relief of nervous affections, took alarm shortly after and has been doing his best ever since to prevent the logical results of his earlier declarations. But his operation took quick hold, and the aspiring gynæcologist who had not unsexed his half-a-score or more of confiding women, soon became an object of contempt even in his own estimation. It was, therefore, some time before the tide could be stemmed, but the prospects for the poor daughters of Eve are now yearly becoming brighter, and the chances are that before long even the gynæcologist will be brought to the belief that the

woman is not all womb. The evils of specialism have been peculiarly conspicuous in this direction and the resultant injury to womankind has been incalculable.

A paper by DR. GRACE PECKHAM, read before the New York Academy of Medicine (Med. Record) is replete with interest in the above connection. It opens with a statement of the fact that the impression is very general that "a woman's organs of generation are the centres from which emanate the most terrible and awful nervous explosions." The literature on the subject certainly warrants this impression, since our most eminent gynæcologists are in the habit of tracing weird reflex neuroses to the genital tract. Four years ago DR. PECKHAM commenced making observations with a view to testing the correctness of this general impression, and her paper is based on the history of 517 cases, of which she gives a very exhaustive analysis. We have space only for her conclusions:

First.—Nervous disturbance outside of the pelvis is not nearly as frequent in disease of the uterus and its appendages as is generally believed. The impression that one severe case makes, effaces that of dozens of simpler ones. Moreover, gynecologists who are men are apt to meet only the severer cases, since women suffer long and in silence before undertaking a treatment which does such violence to their natural modesty. The eminent specialists who have done most of the writing on this subject encounter the most severe and difficult cases, and their object, often, in writing, is to present peculiar and extraordinary cases.

Second.—It has been shown that mere mechanical displacements give rise to almost no disturbance in complete prolapsus. In the other degrees of prolapsus the pain comes from the pulling and stretching of the tissues. Retroflexion occasions the most nervous disturbance outside of the pelvis.

Third.—It can be seen that the amount of disturbance is in every way proportioned to the amount of uterine tissue involved, and the length of time the disease has continued.

Fourth.—It is plainly shown that the reflex nervous symptoms are no more severe nor extensive that arise from displacements and inflammatory conditions of the uterus and its appendages, than would be produced by pathological conditions of the same extent and the same chronic character in other parts of the body. When these are present a previous neuropathic tendency, either acquired or inherited, probably has existed, and the uterine trouble is generally extensive and of an aggravated nature, which, acting on the central nervous system, produces a display of disturbed innervation at the periphery, or of disturbed cerebration, which results in neuralgias or hysterias.

Fifth.—In these studies the effects of uterine trouble upon the eyes have been carefully considered. Three cases, two of endometritis and one of inflammation of the broad ligaments, are found. I have met others, but in these, and looking over the literature, I have reached the conclusion that the eye trouble is generally due to anæmia and general asthenia, and it is doubtful if it can be proven that such troubles with the eyes occur more often in uterine diseases than in others which would produce a similar state of anæmia and depression of the general bodily strength.

Sixth.—Many nervous symptoms are not present *because* of uterine disease, but are due to the constipation and anæmia with which it is so often accompanied.

Seventh.—Nervous disturbances outside of the pelvis are much more prevalent among the more highly organized women of the higher classes than among those of the lower, who have less time to think of themselves, and much less vivid imaginations.

Eighth.—The attention should be called to the fact that sacral neuralgia often stimulates uterine disease; the pain is very like that described in many of the inflammatory conditions with displacement, and even with ovarian trouble. It is often associated with pain extending down the leg, and pain referred to the sides and the back, and it is also accompanied with general nervousness. I recall, now, three cases of sacral neuralgia in which the nerves were tender at their exit on the right side, and the great pain complained of was on the left side.

The minute anatomy of the nerves of the pelvis, and its relations with the so called sympathetic, are far from precise, and we must turn, as has been done in the absorbing questions of brain localization, to clinical data to substantiate hypothesis and theory. I am inclined to think that most of the reflex troubles leave the pelvis through the nerves connecting with the spinal cord, and are thence reflected to the brain, and from the brain to the periphery.

THE INCREASE OF CANCER.

The occurrence of cancer in the case of prominent personages within the past few years, and the minuteness with which the newspapers have reported the symptoms, have had the effect of directing public attention to the disease as was never done before. The popular mind has, indeed, been in a condition of erethism on the subject, and as a result the conviction obtains that the disease is growing in prevalence. The popular conviction is, moreover, supported by statistical returns, although it must, of course, be borne in mind that statistics are of all things the most unreliable. English

statistics show cancer to be twice as prevalent in 1885 as in 1867. The question is, however, one which demands greater attention from the profession than has, perhaps, been accorded it, more particularly as touching measures for the prevention of a disease against which the efforts of both surgery and medicine are so unsatisfactory.

In the case of Bright's disease, the improved methods of diagnosis have had much to do in creating the impression that that disease is on the increase, but although our instruments of precision have enabled us to differentiate more closely than formerly between benign and malignant growths, the fact is not responsible for the impression of the increased prevalence of cancer which prevails. While we are not prepared to say that this impression is erroneous, there is little doubt that the methods of the semi-professional "cancer-curer" have much to do in creating it. There is no disease which has so great terrors for the popular mind, and associated with the fear of the disease is the fear of the knife, the most speedy, safe and painless of the methods for its removal. The itinerant "cancer doctor," as well as the presiding genius of the stationary "cancer infirmary," gifted, as these gentry usually are, with the wisdom of the serpent, understand well how to play on these fears. Their advertisements are deliberately planned to this end, and the instance of any growths being pronounced by them to be benign has never yet been recorded. They apply their caustics to all growths, for with them all are cancers. Their classification of tumors requires no knowledge of pathology. As a result they achieve a lucrative reputation, and the impression that cancer is on the increase is encouraged both by their representations and by the "tooting" of their deceived patrons. While the honest practitioner will recommend the clean removal with the knife of all abnormal growths, even those unquestionably benign, he does not make each case a means of arousing unfounded fears in the minds of both his patients and the community, with the direct purpose of putting money in his purse. His methods are calculated to allay rather than to excite the fears of his patient.

The importance of the question of the prevalence of cancer has not excited the attention which it merits at the hands of the profession. There should be none of the uncertainty on the subject, which is now confessed. The treatment of the disease, as was the case with hæmorrhoids, until within a comparatively few years, is chiefly relegated, by the indifference of the profession, to the hands of empirics. It would even seem, from instances of which we have personal cognizance, that practitioners (glad to be relieved of the disagreeable task of caring for them) tacitly encourage the existence of quackery in this matter, by allowing their patient to be taken in charge by the cancer "specialist." Too many general practitioners, also, it is to be feared, share the popular abhorrence of the knife.

ETERNAL LIFE.

We do not refer to that endlessness of existence which, we are taught, is the reward in some other sphere for rectitude of life and correctness of belief on this earth. The words are taken from an article, designed for popular reading, from the pen of DR. WM. A. HAMMOND, of New York, and refer to the corporeal and not the spiritual part of our nature. In this article DR. HAMMOND argues the possibility, and the ultimate probability, of the elimination of death from the evils which we have come to regard as inseparable from human life. He controverts the dictum of the first chapter of Genesis, that death is due to the inordinate desire for knowledge on the part of our unfortunate first parents. He argues that death came through a loss of knowledge rather than through the acquisition of it; such, at least, is the inference he would draw from facts as they present themselves in this year of grace. Increasing knowledge, and the utilization of such knowledge, have, for several generations, been illustrating their effects in the prolonged average duration of human life. Within fifty years the life of a generation has been lengthened from thirty years to thirty-six years. Looking at the question from this standpoint only, DR. HAMMOND holds that it is merely a question of time when man's life will be extended to thousands of years, and that with an eternity of time, his life will also be eternal. The great desideratum is a proper adjustment of one's food, gratification of animal instincts, habits, etc., to the demands of the individual. If he knew enough to be able to adjust his daily food to the daily requirements of the body, the proper equilibrium between waste and repair would be maintained, and the system would be relieved of the unnatural task of ridding itself of the amount in excess of the demand. A large majority of the morbid affections to which man is subject are due to a lack of this adjustment. Gout, rheumatism, liver and kidney diseases, heart affections, softening and other destructive disorders of the brain, the various morbid conditions to which the digestive organs are subject, would be impossible under a proper adjustment between the supply and the demand of food to the system.

The future which DR. HAMMOND predicts for the race, has, from time immemorial been the dream of dreamers and optimists. PONCE DE LEON sought a short cut to perpetual youth but died before reaching the fountain; thus it has ever been and will ever continue to

be. Death, we believe to be a part of the plan of creation, and the analogies of nature sustain the belief. There is nothing to justify DR. HAMMOND'S prediction, and the most that can be hoped for is a prolongation of life until that maturity, on reaching which the individual drops as naturally as the fully ripe apple falls from the tree. And, as far as we are able to judge, our conception of the plan is a wise and beneficent one. Banish death from the world, and given the fifteen hundred millions, who now exist on the earth, and their natural speed of propagation, how long would it be before mother earth would cease be able to supply food for the progeny? The result of this geometrical progression would, within a century, be the obliteration of mankind, through starvation, from the face of the earth; for the wildest dreamer has never yet pictured to himself a time when animal life can be sustained without food. No, while eternal physical life might in the case of some be a very desirable and a very enjoyable thing. The necessities of the race and, indeed the happiness of the individual, make death a necessity.

THE SUBJECT OF GENERAL AND GROSS PATHOLOGY.

It has often occurred to us when thinking of the pathology of some of our cases, what an interesting picture could be presented if we could only look into their viscera and see the tumors as they really exist and obstruct and disturb functions. But that we cannot do until death closes the scene, and an autopsy lifts the veil. We look to the records, to the dead houses, for our ideas of the real internal appearance of diseases. In a former generation the study of post-mortem appearances was more commonly presented than it is at present, and the great and small medical centers of the world developed museums which contained all the grave features of pathology and in which the student of medicine and surgery could see and study the various morbid processes known as disease and make deductions as to their cures and remedies. DUPUYTREN, the greatest French surgeon, established such a museum, which contained every known pathological condition that the human eye could recognize. It still exists in Paris, open to the world, but, alas! is rarely visited. Why?

The microscope has revealed so much of the heretofore unseen world, that it has absorbed the largest share of professional attention and caused the neglect—the decline—of general and gross pathology. Our German friends have been largely to blame for this Kurtzsichtig, as they are, the microscope becomes their natural ally. LESSING, one of Germany's greatest wits and poets, described a famous surgeon and pathologist as being so nearsighted that he erased with his nose what he wrote with a pencil. How could such a man be expected to give us a natural picture of the gross pathology of cancer of the pylorus; give us a practical idea of its location, the direction of its most frequent growth, that could guide us in its removal?

Its microscopical appearance he could study for hours with the most perfect equanimity. He could picture the nests of cells, the arrangement of fibres, the vascular loops, the white and red corpuscles, the proliferation of tissue, with ease, and he has built up a huge pathology of tissues and of joints in which the gross external visual appearances are scarcely mentioned. He is preaching to us now about the microscopical appearance of lungs and wounds which are not even described so that the practitioner of medicine or surgery could tell to what particular organs these deductions are applied.

We know the microscope has done a good work, but it should not have unbridled influence in making the mental pictures of disease which are to guide us in treatment. The collections of slides and mounts which the microscopists presents are beautiful and useful in their way, but they should not crowd out and overwhelm the collections of gross pathology which are the more practical guides for the relief and cure of human suffering.

Notes.

DR. CHARLES W. DULLES, of the Medical and Surgical Reporter, has taken the initiative in a movement looking towards the restoration of peace on earth and good will among men of the medical profession of this country. He assumes, of course, that there is a yawning chasm, over which it is his desire to have the hand-shaking act performed. Granting his hypothesis to be correct, the work upon which he has embarked is a laudable but impracticable one. While "Blessed are the peacemakers, etc.," is good gospel, the more modern proverb, "Keep your nose out of family quarrels," is, it seems to us, more applicable to the case in point. He who expects peace and harmony in a body of 80,000 men, who are physicians at that, anticipates the millenium. No, brother DULLES, we cannot join you in any systematic attempt to reach the unapproachable. Life is too short. The "unfortunate differences of opinion," to which you refer, must right themselves through the operation of natural laws. They cannot be corrected artificially. Like the sheep in the nursery rhyme, "Leave them alone and they'll come home, bringing their tails behind them."

The uncertain tenure of animal life, both human and brute, and the slight disturbances in telluric conditions sufficient to blot it from the face of the earth, received a striking illustration in the late blizzard in the Northwest. The extent of the destruction caused by it will probably never be known, natural and obvious reasons preventing the local newspapers from recording all the fatalities. A correspondent of the Journal of the American Medical Association declares that the destruction was due to asphyxia and not to freezing. The sudden fall of temperature changed the falling snow into hard crystals which were in turn pulverized by the fierce wind. In this state the atmosphere was charged with it, and thus it was taken into the lungs, where, on melting, it produced a condition similar to that which obtains in drowning. Those who remained in-doors experienced a peculiar oppressiveness, and, unquestionably, many more than were reported who were unable to find shelter succumbed. The evidences of the existence of a prehistoric race of a high order of culture, on this continent, are numerous in the ruins of Central America, as well as in relics which have been unearthed further north. It was, probably, blotted out by some such occurrence as that of which we have had such a recent illustration, and its place taken by the Indians whose ancestors drifted over from Asia.

The Emergency Hospital and Dispensary is the name of a new institution just opened in this city, to be conducted by an association of physicians and representative laymen, organized under the laws of the State. As its name implies, it will make a specialty of the care of accidents, and to that end it has in connection an ambulance with trained attendants, subject to telephone summons night and day. It has accommodation for thirty patients, and the rooms throughout are constructed on the most approved antiseptic principles. The corners of the walls and ceilings are rounded, to facilitate ready cleansing, and are treated to a wash, of which corrosive sublimate is a prominent ingredient. The floors are oiled and waxed, and there is an entire absence of carpets, only small mats being permitted at the bedsides. The bedsteads are of iron and brass. The apartments for out-patients are very conveniently arranged and a capacious lecture-room is provided for the utilization, in the way of teaching, of clinical material presenting. The founder of the institution is DR. HAL C. WYMAN, who has associated with him a staff of local physicians of experience.

DR. HENRY F. LYSTER, of this city, has been appointed successor to the late DR. A. B. PALMER, in the chair of the Principles and Practice of Medicine in the Medical Department of the University of Michigan. DR. LYSTER was a former student and the intimate personal friend of DR. PALMER, and was the latter's choice to assist him in the discharge of the duties of his chair, which had begun to be onerous through his growing infirmity. DR. LYSTER at present occupies a similar position in the Detroit College of Medicine, and it may be that in his dual capacity he may be of service in effecting that amalgamation in medical affairs which has long been the dream of certain parties, both in Ann Arbor and in Detroit. Whether his appointment has any such ulterior object in view, time alone can develop. He is, however, eminently fitted for his new position, combining with the experience of a large practice the habits of a close student. He is, withal, a genial gentleman with a faculty of making himself "solid" with students.

The Medical World is quoted as authority for the following formula for the construction of a man:

℞ Ferri, ℥ j ℈ ij; sodii, ℥ ij ℈ ij; potassii, ℥ ij; sulphuris, ℥ ij ℈ ij; phosphori, ℥ xxvj; fluorini, ℥ iij ℈ ij; chlorini, ℥ xxvj; nitrogeni, lbs. jv; hydrogeni, lbs. xv; calcii, lbs. iij; carbonis, lbs. xlviij; oxygeni, ad. lbs. 168. Misce bene, secundum artem, et adde vitæ, q.s. ut fiat homo.

Without questioning the reliability of the formula, we desire to enter our emphatic protest against this innovation on the old-fashioned and time-honored method. It may be all well enough in theory, but the practical working of it will never become popular.

The necessity of physical exercise is sorely felt by persons of sedentary habits and the ingenuity of the mechanic has been taxed in devising apparatus calculated to permit the greatest amount of exercise with the least amount of work. There is one apparatus, old though it be, which modern ingenuity has failed to improve. It consists of a flat piece of steel notched on one side and fitted tightly into a wooden frame. The steel part is anointed on either side with a bacon rind and thus prepared it is drawn backward and forward over a stick of wood laid on a contrivance popularly known as a saw buck.

The latest suggestion looking to the destruction of the bacillus tuberculosis *in loco* comes from Germany. It consists in keeping the patient in a warm room and having him breathe the external atmosphere through a tube, to the end of which is an attachment which fits over the nose and mouth. It is claimed that cold is destructive to the parasite, and this method of applying it is said to be successful. We have seen the method tried in the treatment of pneumonia with very satisfactory results, but whether these were due to the destruction of bacilli or the abstraction of heat, we were unable to say.

Medical Progress.

THE THERAPEUTICS OF PULMONARY CONSUMPTION BY DEBOVE'S METHOD OF SUPER-ALIMENTATION.—DR. H. B. MILLARD, in the N. Y. Med. Journal, Jan. 28, 1888, publishes a paper on DEBOVE'S and BERGEON'S methods of treating consumption. With reference to the former he says:

Without the bestowal of considerable study and care, DEBOVE'S method can not be easily employed. The preparation of the beef powder so as to make it acceptable to the patient, the skilful use of the stomach tube when it is employed, the regulation of the dose, the toleration of the treatment by the patient, and willingness as well as ability to submit to it, demand a great deal of time and patience on the part of the physician.

The literature, too, upon this subject in the English language is very limited, my own paper,* published in the New York Medical Journal of April 19 and 26 and May 10, 1884, being the only full or accurate exposition that has appeared. Some valuable accounts by DR. DUJARDIN-BEAUMETZ, to which I shall allude again, have also been published recently. The advantage of intimate personal friendship with DR. DEBOVE and yearly visits to Paris have enabled me to represent the theoretical and practical features of his treatment correctly.

Another reason of the limited employment of this method in America is undoubtedly the fact that the *poudre de viande* made by FERRÉ is, on account of the cost of importation, of duties, etc., somewhat expensive, and that it has been kept only, at my solicitation, by a few druggists. These last two difficulties, as I shall show, have, however, been quite overcome.

As to the value of DEBOVE'S method in some cases there can be no question. In the summer of 1883 I passed considerable time at the hospital of La Pitié and saw the *poudre de viande* administered through the tube by DEBOVE, and also so administered it myself. I not only heard from him the clinical history of the cases, but questioned the *internes*, and also corroborated the testimony thus obtained by oral and physical examination of the patients. Some of these seemed nearly cured, and others had gained from fifteen to twenty pounds in weight. In many of these cases I saw verified what DEBOVE states—namely, that, under the influence of super-alimentation:

1. Sweatings cease.
2. Cough and expectoration diminish and then disappear.
3. Patients gain in weight.
4. The strength returns.
5. Physical signs are modified; the signs due to pulmonary indurations or cavities subside, while those dependent on pulmonary secretions disappear. In acute and galloping consumption this treatment is useless. Fever is a contra-indication, unless it comes on in evening exacerbations.

Further than this, several of my own patients have within the last four years recovered or been greatly benefited under this system of treatment. Artificial alimentation is not always easy—often, indeed, impossible; especially indeed is this the case when there is ulceration of the larynx and the patient is very weak.

And here I will allude to the main features of DEBOVE'S system, as my paper, published a long time ago now, must have escaped the observation of many physicians. It was, however, published by PARKE, DAVIS & CO, of Detroit, who I find have yet some copies on hand, which they will send free in case it is desired to study the subject thoroughly.

The essential features of DR. DEBOVE'S system may be mentioned as:

Artificial alimentation by the œsophageal sound (*gavage*).

Super-alimentation, or alimentation by considerable doses of aliment, which according to DEBOVE, can be effected only by the sound, and

Lavage (washing or rinsing the stomach).

"Super-alimentation differs from artificial: by the latter we propose to nourish the patient, and to prevent the disastrous results of anorexia or vomiting; in the former to introduce into the economy considerable quantities of food, and to increase organic combustion."

Anticipating somewhat at this point the description of aliments used by DR. DEBOVE, I would mention that the powder of the muscular fibre of beef is usually employed by him, being mixed with milk or hot water, so as to be about the consistence of cream. Upon the excellence of the powder employed, and its proper preparation when administered, depends, most of all, the success of the treatment.

Other aliments than the powder of beef may be given by the sound, such as eggs in beef-tea, milk, etc.

DEBOVE was led to the invention or preparation of powdered beef by the difficulty he experienced in making other articles of nutriment pass through the sound.

The two methods of administration consist in direct alimentation and forced alimentation, by the former method the food being given as any other food would be, with certain precautions and restrictions; by the latter, the food being introduced into the stomach by the œsophageal tube or sound, this being employed when anorexia, nausea, or vomiting exists to such an extent that nourishment cannot otherwise be taken. DR. DEBOVE employs for the introduction of the mixture into the stomach a soft elastic tube, about three quarters of an inch in diameter, and having at the bottom two fenestra; this part of the tube is twenty-two inches in length, and, although flexible, is of sufficient firmness to be introduced easily; at the opposite extremity to that which enters the stomach there is a joint, and the tube after this is of softer consistence, this part being thirty-nine inches long and terminating in a funnel-like expansion; in this end a large glass funnel is placed, into which the liquid is poured This tube is a modification by DEBOVE of FAUCHER'S, who invented it in 1878. It may also be used for rinsing the stomach (*lavage*), the principles and methods of which are given in another place.*

I will not here enter into detail as regards the mode of introduction of the tube and food, but will refer the reader to the reprint I have

* Super-alimentation, Artificial Alimentation and Gavage, and the Employment of Alimentary Powders by the Method of Dr. Debove.

* The author (*loc. cit.*).

mentioned. DR. DUJARDIN-BEAUMETZ, in his works entitled "Diseases of the Stomach and Intestines"* and "New Medications,"† both translated by DR. HURD, gives a valuable though not very full exposition of DEBOVE'S method, mode of using the sound, etc. This author concludes his chapter on the subject as follows:

"Thanks to gavage, we see the appetite return, the bodily weight increase, the strength come back, and the facts which DEBOVE has published and those which I have noted indicate the great future in reserve for this kind of treatment, which is applicable to all cases where nutrition is at fault, and especially to tuberculosis."

DR. BEAUMETZ in the above-mentioned works describes a modification of DEBOVE'S tube, rendering it, he thinks, easier of introduction, the modification consisting in a diminution of its length and caliber.

The powder can in many instances be administered *directly*—that is, without the intervention of the sound, but not usually in such full doses as when given by the latter.

"The question is often asked," says DEBOVE, "if the sound is indispensable, and if super-alimentation can not be employed without it. It seems to me impossible to obtain super-alimentation, continued a sufficient length of time, if one simply forces the patient to *eat*; and precious time is thereby lost."‡

DR. AMANIEUX, of Paris, published in 1883 an elaborate treatise upon the direct administration of the powder of beef ("De la poudre de viande, son administration directe"), and his own experience is that it can always be given without the sound.

I am led to review rapidly some of the features of DEBOVE'S treatment in part by the perusal of an editorial article in the "Therapeutic Gazette" of September 15, 1887, entitled "A New Method of treating Phthisis by Super-alimentation," which in turn is inspired by a paper in the "Pharmaceutische Zeitschrift für Russland," 1887, No. 24, by DR. LANGOWAI, of the clinical staff of PROFESSOR OLTROUMOFF, of Moscow. This article describes DEBOVE'S method: "In his investigations, DR. LANGOWAI selected five cases of phthisis in the Moscow Clinic in whom every means of diagnosis proved the existence of the disease in pronounced form. It was found that those cases in whom the parenchyma of the lung was not badly diseased sometimes recovered perfectly, while the worst cases were maintained for a long time. He gave his patients (daily) an amount of beef powder equivalent to three pounds of beef."

After this outline of the characteristic effects of DR. DEBOVE'S treatment, I will now describe more fully the character and preparation of the powder to be employed, its therapeutic and physiological effects, etc. DEBOVE prepared it by selecting beef as free as possible from fat, separating it from the tendinous portions, and passing it through a chopping machine, making a coarse paste, which was then spread on plates and dried in stoves at a temperature of 90° centigrade (226° F). The beef, hardened by drying, is triturated in a mortar, and then passed through a fine sieve. The powder thus prepared is impalpable, dry, and can be preserved indefinitely, if carefully kept from humidity, and is almost without odor. To make one pound of the powder, about six pounds of fresh beef are required, and one pound of the powder is equal to at least four of pure muscular fibre. Of this, as much as 400 or 600 grammes have been given by DEBOVE daily, the latter quantity being equal to five pounds of beef. This is literally super-alimentation, and, unless provocative of some disturbance, could scarcely fail to bring about all the changes dependent upon thorough nutrition. Such large quantities as 600 grammes are, however, not often attained, and only, I believe, by the sound.

Simple as its preparation seems, practically it does not appear so. I was shown at La Pitié numerous samples made by various chemists; they were either strong-smelling, nauseous, or unpleasant to the taste; some had putrefied, and showed under the microscope numerous living organisms; one, made from horse flesh, had a repulsive odor, but not more than one of the other preparations made from beef.

That the qualities of purity and freedom from disagreeable taste and odor are important, especially when the powders are used for direct alimentation, is evident when it is considered that they are usually administered where there is antipathy to food, with perhaps nausea and vomiting. DR. DEBOVE used exclusively for a considerable time a preparation made by J. FERRE, a distinguished *pharmacien* of Paris; he considered it perfectly satisfactory, and even better than that made by himself. I have had a package in my possession for two years, and, although it has for a year lain open in my office, it has undergone no deterioration.*

I am glad to be able to state, however, that Parke, Davis & Co., after experimenting nearly two years, have succeeded in making an article in all respects equal to that of FERRE. The retail price is one dollar a box of half a pound. It must be considered that eight ounces of the powder are equivalent to two pounds and a half of the fillet of beef, which would not be sold at less than fifty cents the pound.

Other modifications of the powder recently manufactured by Parke, Davis & Co. are a mixture of this powdered fibrin with a small quantity of chocolate, and also powdered beef, which represents the fibrin, together with all the salts and all the extractive contained in fresh beef.

It is not my purpose in this article to recapitulate fully the theories and experiences of DEBOVE, nor my own account as drawn from my observations and from various French writers. The reprint I have mentioned, and the writings of DUJARDIN-BEAUMETZ, will afford all the information required. I desire simply to bring to the notice of my fellow-practitioners the fact that DEBOVE'S method is none the less promising and useful than when first introduced, and to awaken in them a new interest in it. Certainly to its employment some of my patients are indebted for great relief or recovery.

I will conclude this article by an extract from DR. DUJARDIN-BEAUMETZ relative to this subject (loc. cit.):

"As for alimentation, the method first brought into vogue by DEBOVE has proved to be of the

* New York, William Wood & Co., 1886.
† Detroit. George S. Davis, 1887.
‡ The author. *loc. cit.*

*The author, loc. cit.

highest utility, and it is to-day generally admitted that, in certain cases where the integrity of the digestive tube is complete, one may, by super-alimentation, obtain amelioration and even cure in pulmonary consumption. The important communications of BROCA and WINS have given us many conclusive observations to this effect, and my pupil, DR. PENNEL, published in 1882 a series of cases where the beneficial action of forced feeding was most manifest."

MENTHOL IN LARYNGEAL AND PULMONARY PHTHISIS, AND IN OTHER DISEASES.—It is now nearly two years since A. ROSENBERG, of Berlin, brought before the notice of the Berlin. Medecin. Gesellschaft his menthol treatment in connexion with pulmonary and laryngeal phthisis, and in a paper read before the same Society on 6th April, 1887, he further established his former statements from the results of his more extended clinical experience since that date. A twenty-per-cent. solution of menthol in olive oil is the strength generally employed. Olive oil may be made to take up more than twenty per cent. on heating, but the menthol will recrystallize when exposed to the cold, and the mixture form a solid mass.* Slightly warming will cause it to redissolve, and in this manner we can use the drug in a highly concentrated form. The syringe devised by myself, and made by GARDNER, of Edinburgh, serves for injecting the fluid both into the larynx when it is the seat of the disease, and into the trachea when the lung only is affected. It is better to make at each sitting two or three injections, of about fifteen minims in each, directly on to the part affected. By this means more prolonged contact of the agent with the diseased tissues is secured.

After each injection, which ought, of course, to be made under the guidance of the laryngeal mirror, the patient should be made to take deep inspirations, whereby the cooling and anæsthetic effect produced by the menthol is accelerated. No danger whatever results from such an endolaryngeal or endotracheal method of treatment, and no untoward or disagreeable effects follow the introduction of such large and concentrated solutions of menthol into the system. The patient at first feels a slight burning sensation in the larynx, which is quickly replaced by a cool pleasant feeling, and in a few moments a warm sensation is experienced all over the chest, due to the solution finding its way into the lungs, which it does according to REICHERT'S experiments, of a series of twelve endotracheal injections on calves and sheep, even to the finest bronchioles. The injections should be performed once or twice daily for about two months, and the treatment by injections should be combined with inhalations for five minims, or as much as the patient can bear, of the same solution in a pint of steaming water, if possible at first every hour during the day. Also a convenient method, and one which is employed by DR. MCBRIDE in the Infirmary, is to drop some of the solution of menthol on to a piece of cotton wool, and make the patient wear the same frequently before the mouth and nose. The patient sometimes finds it more convenient to sleep with this on.

Menthol possesses in a marked degree the anæsthetic action of the oxyhydrocarbons of the volatile oils. A few minutes after its application, pain and other uneasy sensations in the larynx disappear, and that *bête noir* of laryngeal phthisis, viz., dysphagia, is combated to such an extent, that the patient is at once enabled to eat without pain. The effect of this is readily appreciated. Nutritious foods can be at once taken into the system, and the general health of the patient thereby improved. With regard to the anæsthesia produced by menthol, ROSENBERG has pointed out a very interesting fact, viz., its cumulative effect. "After the first injection," says ROSENBERG, "the anæsthesia lasts from one to three hours, after the second or third still longer, so that after a week the effect lasts for a whole day."

The antiseptic properties of menthol also are very marked, as has been experimentally proved by KOCH and other observers upon various forms of bacteria. ROSENBERG has demonstrated its destructive effects upon tubercle bacillus by subjecting pure cultivations of this micro-organism to menthol in a gaseous form.

Shortly after the beginning of the treatment, an improvement in the condition of the patient can be seen. If the larynx be the seat of the disease, one notices that the abnormal secretion is much diminished, and its whole surface becomes cleaner and healthier. This is also shared by the ulcers, which finally heal, leaving beautiful smooth cicatrices, better than one sees after the use of lactic acid. But there are certain cases which don't yield to this treatment so readily, and these are marked infiltrations and tumefactions. These yield better to the application of lactic acid, but even here the resistance to treatment is great, and is accelerated by first curetting the infiltration with Hering's laryngeal curette, and afterwards by the employment of menthol or lactic acid, or of both. I say both, because menthol is a very useful adjuvant in the lactic acid treatment (introduced by KRAUSE) where it should be injected two or three minutes before the application of the acid. By this combined method a quicker result is obtained, for even by itself the lactic acid brings about quicker cicatrization of the ulcers. But there are certain advantages which menthol has over lactic acid. The former, if injected carefully and precisely with the laryngeal syringe, and not applied with a brush, which causes pain, is certainly not unpleasant to the patient in its application, and when the subjective symptoms in the larynx are subdued some few minutes afterwards, the patient's spirits are raised, and the appetite at once manifests itself, especially if dysphagia were a symptom—so that the patient, as I have repeatedly seen, gets to enjoy the treatment. In the case of lactic acid, where one must apply the remedy accurately and vigorously for a few seconds to the affected part—best done by means of a piece of cotton wool affixed to Krause's Kehlkopfpincette, or to Hering's laryngeal Tamponträger—one can readily understand that such vigorous treatment is not at all unaccompanied by pain, though its severity in many cases is not so

* In a twenty-five-per-cent solution the menthol begins to crystallize out when the temperature is reduced to 55° Fah.

great as one would expect. As for the patient losing flesh during the lactic acid treatment, which has been asserted by some, I must say that such has not been my experience, and I have had a large one in Krause's clinique in Berlin. What appears to me to be a very important advantage in the menthol over the lactic acid, is that in the former the medicament is not confined to one spot, but extends over a large surface, viz., the whole of the larynx, trachea, etc. A case in point will illustrate the fact. At the congress of the "Society of Naturalists and Physicians," held in Berlin, Hering, of Warsaw, produced a larynx to show that he had cured a laryngeal ulceration by the use of lactic acid. In other parts of the same larynx suspicious points were observed and pointed out by Professor Chiari, of Prague, as being probably tubercular, and such indeed they were proved to be on subsequent microscopical examination by Virchow. Certainly the tubercular ulcer had been healed in this case, but the tubercular disease had not been wholly exterminated from the larynx.

Besides improvement and cure in the laryngeal condition, one sees a similar result in the pulmonary condition, if the patient come early enough under treatment. Directly after the injection the patient experiences a remarkable lightness and freeness in the breathing. The sputa, during the course of the treatment, gradually lose the nummular character, become less and less purulent, and finally disappear. There is a marked diminution in the cough and an improvement in the voice. The night sweats diminish, the bodily weight increases, and the system generally is improved. Rosenberg relates the very interesting case of a patient affected with both pulmonary and laryngeal phthisis in its early stage, who was treated by him with menthol. The morbid processes here had cleared up to such an extent that the patient was enabled to "pass" the ordinary examination for life insurance at the hands of a well-known expert of a life insurance company. (Manifestly the rules of the insurance companies in Germany are not the same as in Great Britain, where the applicant is required to enumerate previous illnesses).

I can give an unqualified confirmation of the good results from Rosenberg's method of treatment, since through his kindness I have treated many of his patients, and watched his results for many months. One should not give up the treatment too early, though later the applications may be made less frequently. Of course it is not pretended that very confirmed cases of phthisis can be cured by this method of treatment, but its employment here relieves many of the distressing symptoms. The sputum is more easily expectorated, the coughing much alleviated, and the morbid processes for a time retarded.

With the object of securing more prolonged contact with the diseased tissues in phthisis laryngea when there is much secretion present, I have introduced a powder to be insufflated alternately with the injections. The formula is as follows:

℞ Menthol, ʒ ss.
Ammon. chlor., ℥ iss.
P. acid. boric, ʒ j.
M.

The same powder, when pulverized very finely, will be found to be very useful in chronic laryngeal catarrh, and the after sensations are not so unpleasant as those which follow upon the insufflation of ordinary powders.

In the form of snuff, a pinch of it may be taken frequently into the nostrils for acute and chronic laryngeal catarrh, and will be found to cause a great diminution in the muco-purulent secretion, and to relieve headache and neuralgia attendant upon the condition. Directly after it is taken, a flow of watery mucus is induced, and thereafter the nose remains cool and free.

The marked antiseptic properties of this snuff, and its power of causing a copious watery secretion led me to use it in ozæna, and the results obtained have been very satisfactory. The horrible fœtor is quickly removed, and the frontal headaches disappear. The nose becomes freed from crusts, and its mucous membrane will be seen to be in a moist condition and of a more healthy aspect. The snuff here should be taken frequently—from twelve to twenty times daily—and the secretion which follows its use should be retained in the nose, with the object of softening the crusts and rendering their expulsion easy. If they have been previously expelled, this precaution will prevent their appearance. The patient should also be enjoined to draw the powder back through the nose into the mouth, with the object of reaching the crusts in the naso-pharynx, and of relieving the dysphagia and hawking due to the concomitant pharyngitis sicca. If, by way of experiment, some of the powder be insufflated into the naso-pharynx, the pharynx, which was previously dry and shining, will now be seen to be bathed with a copious moist secretion.

Menthol is a vascular stimulant, and quickly reduces the swelling of the swollen nasal mucous membrane. It also possesses the power of what Jelineck pointed out with regard to cocaine, viz., of reducing erectile swellings of the nose—mostly situated on the inferior turbinated bones where the cavernous spaces are the largest—by emptying the cavernous tissue of its blood. Thus menthol is indicated in those cases of nasal obstruction due to these causes, and will be found to be extremely useful in chronic rhinitis associated with a muco-purulent secretion most commonly met with in scrofulous children. A short time ago, a woman came to me with a child of five months old, complaining of its inability to sleep and suck properly through the "snuffles." The other members of the family showed distinct evidences of syphilis, and the child itself was being treated for the same disease by the family physician. On examination, I diagnosed the case to be syphilitic rhinitis in the first stage, and ordered the interior of the nose to be painted with a 5-per-cent. solution of menthol in olive oil. The effect was immediate. The child could suck with ease, slept soundly, and showed other signs of general improvement. The importance of rendering the nasal passages clear in sucklings, whether the obstruction be due to syphilitic or ordinary catarrh, is paramount.

Menthol has a decided action in relieving the pain and swelling in acute catarrhal angina. A 25-per-cent. solution of it in olive oil should be copiously applied to the pharynx by means of a large soft brush. The pain and dysphagia

are removed, the patient is enabled to secure sleep, the severity of the disease is mitigated, and the convalescence quickly sets in. In some cases the subsidence of the swollen and inflamed tonsils has been remarkable, without any abscess formation. If there is acute rhinitis accompanying the disease, the solution should be painted into the nostrils also, the strength of the solutions I use in this purpose being from 5 to 20 per cent., according to the age of the patient.

In cases of chronic pharyngitis with hyperæsthesia or paræsthesia I use the well-known MANDL'S formula with menthol superadded, the prescription being as follow:

℞ Iodi, gr. vj.
Potas. iod., gr. xx.
Aquæ, ʒ iij.
Menthol, ʒ iss.
Glycerini, ʒ vj.
M

The menthol, which should be powdered very finely, is for the most part here suspended in a fine state of division, and the mixture requires to be shaken occasionally.

As might be expected from the action of menthol in other forms of neuralgia, I have found it to give relief in otalgia by dropping strong solutions of it in olive oil into the ear. In those cases of acute middle-ear catarrh, which are associated with an inflammatory condition of the naso-pharynx, I have found painting the vault of the pharynx with a menthol solution to cut the attack short. Some of the vapor of the menthol also enters in Eustachiaa tubes and middle-ears, and exerts a beneficial influence in allaying the inflammation in these latter situations. Albert J. BEEHAG, M. D., in *Edinburg Med. Jour.*, Jan., 1888.

ON THE TREATMENT OF FŒTID CORYZA.—The obstinate "nasal catarrh," attended with excessive production of thick, discolored and offensive mucoid material, the discharge of which into the pharynx forms one of the most distressing symptoms, is a troublesome condition to treat; yet one which yields in greater measure than is commonly supposed, to active, intelligent, persistent, mild treatment.

I prefer the name proposed by J. Solis-Cohen —fœtid coryza—to the more recent term, "atrophic rhinitis," because the latter designation is not always applicable. I have seen quite a number of cases in which there was little or no atrophy of the turbinated tissues; although it is undoubtedly true that in the majority of cases there is considerable atrophy of these structures—often, indeed, the entire lower turbinated body, bone and all, will have disappeared almost without trace. The name ozœna, frequently applied to this affection, is sometimes made so general, and sometimes so restricted, that I prefer to discard it altogether.

The remarks concerning treatment, that follow, are not concerned with those forms of fœtid coryza which depend upon ulcerative processes, or the presence of calculi or other foreign bodies; in which cases removal of dead bone, or foreign body, is of course indicated, and the particular measures to be instituted will depend upon the extent and situation of the disease. When there is but slight ulceration, or beginning localized necrosis, scraping of the tissues, followed by cleansing and disinfectant measures, may alone be required.

In those cases where the nasal structures are as yet intact, or where there is simple atrophic change, the treatment, as a rule, is very simple; but it needs to be persisted in.

The first principle is cleanliness. No matter what the origin of the masses which are discharged, or which more often remain pent up in the nasal chambers, giving rise to offensive odors, their presence is an additional source of irritation, tending to prolong diseased conditions; and they must be gotten rid of.

Simply spraying the nose by means of an ordinary hand ball atomizer will not answer. The nasal douche is apt to be abused, or used improperly, if entrusted to patients. The patient should be given an atomizer throwing a coarse spray, and directed to use some simple detergent solution, such as borax, soap bark and tar water, or even ordinary table salt in water (warm) thrice daily, in order to do what he can towards keeping the parts clean; but at first, frequent visits to the physician's office will be necessary in addition, for the performance of manipulations which the patient cannot exercise upon himself.

The passages should be first sprayed thoroughly with a coarse spray of a warm solution of hydrogen dioxide in distilled water, one part of a 15-volume solution to one or two parts of water, and then syringed with warm water, say 100° F., alkalinized with borax or baking soda, to which also a small quantity of the liquor carbonis detergens may be added. The syringing must be carefully and gently done, first through one nasal passage, then through the other, anteriorly and posteriorly; the latter procedure being accomplished by means of a curved nozzle reaching up behing the palate. With a little practice these manœuvers may be executed without discomfort to the patient. The masses loosened by spraying and syringing must be expelled by the patient's efforts, and the measures must be continued, supplemental if need be, by gentle swabbing with a cotton wad, until the nasal passages and pharynx are absolutely clean. The fact of cleanliness should be ascertained by rhinoscopic inspection. If the patient makes daily visits for the first two weeks, in an ordinary case, at the end of that time it will be found that it is both easier to cleanse the passages, and that the amount of material to be removed has considerably lessened. The patient will also report that he has had less difficulty in maintaining the cleanliness secured, by his own little performance with the hand-ball atomizer. According to the progress of the case, the patient may soon be instructed to call only every other day, and his own home procedures be augmented by direction to snuff up from the hand, morning and evening, warm milk, containing a pinch of table salt. And as the improvement continues, the intervals between the active measures of the physician are gradually lengthened; until, in an ordinary case, at the end of six months the patient is able to keep himself comfortable by the use of the atomizer night and morning.

This persistent cleansing is the essential

feature of the treatment. In addition, the individual conditions of different cases suggest a variety of measures. After cleansing, it is advantageous in cases showing signs of sluggish inflammation to apply to the nasal mucous membrane a solution of iodine and carbolic acid in glycerin (one grain each to the ounce) by means of brush or cotton-wad. Very often the insufflation of some disinfectant powder, such as iodoform or boric acid, or a mixture of the two, will materially assist progress.

When, notwithstanding the accumulation of fœtid mucoid or muco-purulent masses, there is reason to believe that the normal moisture of the nasal passages is deficient, the inhalation of the recent vapors of ammonium chloride is quite useful in stimulating the mucous membrane to healthy activity. Inhalation through the nose with exhalation through the mouth, is preferable to the ordinary method of inhalation through the mouth and exhalation through the nose. The apparatus required is very simple and may be constructed for one's self with a hand-ball and a few bottles and glass tubes. It is important to wash the vapor thoroughly to remove any excess of either hydrochloric acid or ammonia.

This measure is particularly serviceable in cases in which the discharge consists almost wholly of dessicated masses of epithelium desquamated in an immature condition. The inhalation of oxygen is often beneficial. Thymol, eucalyptol and other balsamic and antiseptic vapors may also be inhaled. A weak solution of thymol in alcohol may be shaken up with warm liquid cosmoline and the nasal passages sprayed therewith.

Internal treatment is sometimes indicated. In strumous children, arsenical preparations may be given, of which I prefer Donovan's solution. Iodide of iron and cod-liver oil are sometimes useful. Potassium iodide may be given, to cleanse the passages by the flux of an artificial serous coryza, sometimes with quite happy effect. I usually resort to this measure at intervals during the course of treatment. Cubebs may be administered in the form of the oleo-resin dropped on sugar, or in pill of the recent powder, to gently stimulate secretion during its elimination by way of the nasal mucous membrane. Ten to fifteen drops of the oleo-resin of cubeb three times daily, after meals, is the ordinary dose for an adult.

Diet should be regulated. It is important to forbid patients, especially children and young women, to eat candy, pastry, and sweets. The prohibition must be absolute. Starchy foods should be reduced to a minimum. The functions of the digestive and excretory organs, includingt he skin, must be carefully watched and maintained at a proper standard. Exercise in the open air and hygiene in general must not be neglected.

By carefully maintaining general nutrition and vigorous function, with the topical measures already described to secure and maintain cleanliness, and such constitutional medication on the lines indicated, as the individual case may require, the case of catarrh that cannot be greatly ameliorared must be exceedingly rare; and what is practically a cure may be obtained in the majority of cases. As a matter of course, the longer the disease has existed the longer it will be necessary to continue treatment. A month for a year, and three months in any case is a fair rule.

It may be necessary for the patient to continue cleansing the parts by means of his atomizer as a part of his regular morning toilet; but that surely is a very little matter in comparison with the discomfort and annoyance which the possession of a fœtid coryza entails upon the patient and those with whom he comes in contact.

I have deferred until now the mention of the cutting, burning and boring methods, happily becoming less prevalent in the management of all forms of nasal disease, in order to mention my conviction that they have often converted a simple case of catarrh, amendable to the mildest measures, into very obstinate cases of the affection now under consideration.—SOLOMON SOLIS-COHEN, A. M., M. D., in *Med. and Surg. Reporter*, Jan. 14, 1888.

ON THE USE OF STRYCHNINE AS A HYPNOTIC.—Quiet sleep usually comes readily and quickly to any healthy person who is tired, but not over-tired, with bodily or mental work. But, as too many know, there is a condition of excessive fatigue, either bodily or mental, and more especially of that fatigue which follows intense mental strain or worry, which prevents the unhappy sufferer from obtaining the rest and refreshment by sleep of which he stands so greatly in need. The treatment of such cases is very difficult. The use of opium or other narcotics is objectionable, not only because it may tend to induce that dreadful condition, the opium habit, but because it frequently happens that the sufferer from sleeplessness is obliged to have all his faculties clear and all his wits about him in order to get through his daily work. The administration of opiates at night tends in many people to produce a certain amount of dulness through the day, which would render the use of these drugs inadmissible, even if there were no other objection to their use.

Chloral is not so objectionable on this account, as it may induce sleep without in the least obscuring the mental faculties next day, but the use of chloral also is objectionable both because of the tendency to the formation of a chloral habit, and because its long continued use may have a weakening action on the heart and also a deleterious action on the brain. I have seen at least one case in which the continuous use of chloral appeared to induce mania, which began to improve as soon as the patient was removed to an asylum and cut off from the use of the drug.

Bromide of potassium is probably the least objectionable of all, but in many cases of overwork it seems to lose entirely, or almost entirely, its hypnotic action.

In treating some cases of persons engaged in literary work who were suffering sleeplessness and yet were obliged to have their brains perfectly clear during the day, it occurred to me that if I could convert the condition of overtiredness into a condition of simple tiredness, the patient would naturally fall sound asleep without the use of any hypnotic. One can sometimes do this to a certain extent by giving some warm beef-tea or a teaspoonful of Valentine's meat juice in water, either hot or cold, or

by giving a little alcoholic stimulant, such as whisky and water or brandy and water. It is probable that these substances have a double action, tending to dilate the vessels of the stomach and withdrawing blood from the head, as well as tending to exert what we may vaguely term a stimulant action on the nervous tissues themselves, without understanding what the exact nature of this stimulant action is. It occurred to me that as strychnine is one of the most powerful stimulants, if not the most powerful nervous stimulant that we possess, a small dose of it might have the effect of bringing the depressed nervous system up from the condition of over-fatigue to that of simple fatigue, and thus induce sleep. I accordingly tried it, and was much pleased with the result. It acted in the manner that I expected, and induced comfortable, healthy sleep without any disagreeable effects next day. The way in which I have used it has generally been either in the form of the tincture of nux vomica in doses of five to ten minims or in the form of granules, containing $\frac{1}{200}$ of a grain of sulphate of strychnine in each. One, two, or more of these granules were given at bedtime, and the dose was repeated if the patient happened to awake within one or two hours afterwards.

I think it very doubtful, indeed, whether strychnine would answer in other cases of sleeplessness than those arising from overwork or worry, and more especially from overwork. I have tried it however in a case of sleeplessness occurring in anæmia, but as the patient at her next visit complained that the medicine made her sleep rather too heavily, I am not quite sure how far mere suggestion may have played a part in effecting the result, nor have I been able as yet completely to eliminate this factor in other cases. The results which strychnine has yielded in my hands being so good, and the condition for which I have used it being so distressing, I have thought it worth while to mention its use as a means of affording sleep in order that others may try it as well as myself, and may, I hope, obtain from it equally good results; although it only too frequently happens that a drug seems to prove very much more effective in the hands of the man who first employs it than of those who try it afterwards.—T. LAUDER BRUNTON, M. D., in the *Practitioner*, Jan., 1888.

SHEPHERD'S PURSE (BURSA PASTORIS)—A UTERINE HÆMOSTATIC.—Little Shepherd's purse, neglected cinderella, what a treasure in folk medication! Long used by country people in hemorrhage of the uterus, it has as yet won for itself no place in the armamentarium of the physician, because the physician sometimes in error, will not listen to the good counsel of the female neighbors. In the text-books under bursa pastoris, it is stated "slightly astringent" —"strongly astringent," it should read, for the efficacy of our indigenous drugs has as yet been very insufficiently determined. At high prices we buy the Indian herbs of America, often of dubious worth, and have a prophet in our own land; we need not sow and can still reap the harvest.

"Vulgi experimenta non semper deliramenta." More than a year ago, DR. V. EHRENWALL, proprietor of the large institution for nervous diseases at Arhweiler had a case of dangerous hemorrhage of the uterus; the remedies employed failed; a strong infusion of the herb of Shepherd's purse, brought by a neighboring woman, availed. DR. V. EHRENWALL called my attention to this action, suggesting that I investigate the Shepherd's purse thoroughly, and make an extract therefrom, which would certainly be effective. Other labors have hitherto prevented my doing so, and I have just finished my investigation. I found besides small quantities of a tannic substance (forming a green precipitate with solution of ferric chloride), an alkaloid, bursin, a sulphocyanic compound similar to sulpho-cyanate of sinapin. I could not isolate the alkaloid which decomposes easily. I could, however, prepare a muriate from the double compound with platinic chloride.

The best form seems to me to be the strong fluid extract, of which ½ teaspoonfuls given in water suffice to stop the bleeding. The taste is faint, sweetish, slightly herby. Whether the remedy is serviceable for subcutaneous injection, experiments will soon decide. The *bursa pastoris* is worthy of a place at the side of *secale cornutum*, is much more effective than *lamium album*, *urtica urens*, both of which contain the alkaloid lamin as a reagent, but which on account of the sharp, salty taste are not so pleasant to take as the bursa pastoris. We possess in these indigenous drugs the best hemostatics.—*Pharm. Zeitung*, Jan. 25, 1888.

THERAPEUTIC APPLICATION OF KAVA-KAVA.—DR. WEINSTEIN, according to the Vienna Med. Blaetter, prompted by the labors of DR. LEWIN on kava-kava, has tested kawa in various affections, in the medical department of PROF. DRASCHE in Vienna. The mode of prescription was as follows:

℞ Ext. Kavæ depur., 0.20.
Sacch. alb., 3.00.
M F. pulv. divid. in dos.

D. S. Every three hours, 1 powder.

In acute polyarthritis kava acted as an analgesic, without, however, exerting an influence on the process itself.

In emphysema and tuberculosis good effects were manifested against the dyspnœa; it has only a weak action as a diuretic with dropsical patients; with healthy kidneys, it affects favorably the secretion of urine, increasing the secretion from 800 to 1000 ccm. per day to 1800 to 2200 ccm. Also in gonorrhœa and catarrh of the bladder, with parallel soothing effect on the nerves of the bladder.

In small doses up to 0.1 per day, the kawa was employed with success in acute and chronic catarrh of the stomach, in dyspepsia and cardialgia.—*Deutsche Medizinal-Zeitung*, December 22, 1887.

THE TREATMENT OF ABORTION IN THE OBSTETRICAL CLINIC OF FLORENCE.—FASALA has observed the following rules in the treatment of abortion, with good results:

1. An expectant course is pursued when the cervix uteri is closed, and can be dilated with difficulty, and if no signs of the decomposition of the fœtus are present.

2. Under conditions favorable for the in-

troduction of instruments of the hand, the ovum and its appendages are promptly removed.

3. If decomposition has begun, the cervix is dilated by laminaria tents or metallic dilators, and the ovum is removed.

4. Intra-uterine injections for antisepsis are made with warm solution of bichloride of mercury, 1 to 2000; in case of hæmorrhage, hot solution of bichloride of mercury, 1 to 4000, and tamponing the vagina, are used.—*Annali di Obstetricia*, March, 1887.—*Gaillard's Med. Jnl.*, Jan., 1888.

SACCHARIN IN DIABETES MELLITUS.—In a case of severe diabetes of a man aged 30 years, a not inconsiderable, temporary decrease of the quantity of urine and sugar was effected by the use of saccharin. During the use of large doses, there was loss of appetite. Patient complained of a continuous, disagreeable, sweet taste (also on exhibition per pills) which prevented the taking of food on account of nausea.

As saccharin in no case causes an increase in the production of sugar, it may be used to sweeten the foods and beverages of diabetics, tho' in one case in which the remedy was given in this manner, the collateral taste of the saccharin was unpleasantly observable for a prolonged time.—*Deutsches Arch. F. Klin. Med.*, xli, p. 178.

CONDURANGO AS A STOMACHIC.—In his treatise on the diagnosis and therapy of diseases of the stomach, PROF. DR. FRANZ RIEGEL, Giessen, speaks as follows of condurango:

With reference to stomachics, I will in a few words mention that among all the remedies, none has proven so valuable in my hands as the condurango bark which I recommended more than ten years ago and in opposition to FRIEDREICHS who believed to have found in condurango a specific against cancer. As to the manner of the action of this drug, we are even to-day not quite enlightened. The best mode of administration is in the form of the condurango wine.—*Pharm. Zeitschrift fur Russland*, Dec. 20, 1887.

BENZOATE OF SODIUM IN URÆMIA.—PARZEVSKI puts forth some remarkable claims regarding the curative power of sodium benzoate in uræmic intoxication (quoted in Bull. Gén. de Thérap., December 15, 1887). He administers four to eight grammes (ʒ j–ʒ ij) a day, in solution or capsule, the latter preferably. Twice the quantity can be given by the rectum if well diluted. Under the action of this remedy the paroxysms lessen in severity, the intervals grow longer, and the convulsions after a time cease entirely. Profound sleep is induced by it, and during this the cerebral functions are restored. When albuminuria exists, a marked diminution occurs in the quantity present, or the albumen disappears entirely.—*Amer. Jour. of Med. Science*, Feb. 1888.

OSMIC ACID, HYPODERMATICALLY, IN INTERCOSTAL NEURALGIA.—SEELIGMULLER has treated intercostal neuralgia by hypodermatic injections of osmic acid, in solutions of from one to ten per cent. The injections were made deeply into the muscles along the spine, and produced sharp pain at first, followed by relief.

In treating neuralgias of nerves containing both sensory and motor fibres, as the sciatic, the writer would not advise the use of a solution stronger than one per cent. fearing paralysis from stronger solutions. His usual dose in intercostal neuralgias was half or the whole contents of an ordinary hypodermic syringe.—*Therapeutische Monatshefte*, Dec, 1887.—*Med. News*, Jan. 28, 1888.

QUEBRACHO IN SURGICAL PRACTICE.—DR. BORDEAUX, of Brussels, who has used quebracho a good deal during the last year or two, speaks very highly of it as a topical application for wounds and burns. The liquid extract is the preparation employed, and it is painted with a brush over the wound like collodion. The slight pain it causes is very transient; it becomes hard in an hour's time, forming a brownish crust, which can only be loosened with the aid of hot water. This crust is quite sufficient protection, no dressing being required. It promotes healing by first intention, and greatly assists the process of granulation.—*Medical Record*, Jan. 21, 1888.

JAMAICA DOGWOOD IN SPASMODIC COUGH.—Extract piscidia made from the West Indian leguminosa piscidia erythrina, is recommended by DR. LEOPOLD PATEK in the Med. Chirurg. Centralblatt, against the prolonged convulsive attacks of cough of phthisical patients. Extr. siccum is employed in doses of from 0.25 to 0.5 g., as well as fluid extract, 3 to 6 grms per day, in drops or in form of mixture with 200 parts water and some syrup. The author reports the hypnotic action, ascribed to the drug in other quarters, only in rare cases.*

A SNUFFING-POWDER FOR CORYZA.—M. PIERRE VIGER (Gaz. hebdom. de méd. et de chir.) considers a powder composed of equal parts of powdered starch, boric acid, and tincture of benzoin to possess certain advantages, especially that of not being too light. The mixture should be triturated for a moment, then dried with a gentle heat, and put into a box, without pushing the powdering process too far. The rapidity of the effect is proportionate to the amount of the powder used and the frequency with which it is employed.

SAVINE IN THE TREATMENT OF CANCER.—DR. LUCAE, of Berlin (Therap. Monatsh., Rev. gén. de clinique et de thérap., Dec. 22, 1887), reports a case of cancer of the external ear cured by the persistent application, three times a week, of a powder of equal parts of savine leaves and burnt alum.—*N. Y. Med. Journ.*, Jan. 21, 1888.

* There are some prepations of Piscidia on the market which are made from the bark of the tree, while the fl. ext. of the bark of root should preferably be used.

The Medical Age.

Vol. VI. DETROIT, MARCH 10, 1888. No. 5.

Original Articles.

MANAGEMENT OF THE THIRD STAGE OF LABOR.

BY WM. A. M'COY, M. D., MADISON, INDIANA.

There is probably no time in the experience of the physician when his resources will be more severely taxed, when he will be required to act more promptly, with no time to consult authorities or call consultation, than during this stage of labor. It is here we are confronted by some of the most alarming experiences incident to the practice of our profession. In a short article, such as I have prepresprescribed for this, I cannot discuss it in all its phases, but will touch a few of the more prominent and common of its features.

Separating the child from its mother, we turn our attention to the placenta. After the expulsion of the child, there will usually be a few moments of uterine repose, during which it is my custom to make gentle traction on the cord with one hand, while with the other gentle pressure is made on the uterus, to ascertain if the placenta is free. If it is, this combined movement of compression and traction will usually bring it away readily, much easier than if it is permitted to remain till the uterus contracts upon it. But if we find the placenta still adherent, we wait a few moments for the uterus to contract and separate the placenta, when it may be removed.

I am aware there is a difference of opinion among authorities at this point, as well as elsewhere in the management of the lying-in woman.

Churchill tells us, if there be no flooding, we may permit our patient to rest awhile, and after the uterus contracts we may make gentle traction on the cord to ascertain if the placenta is detached. Why we shall wait till after contraction to ascertain that fact, I do not know, and he does not tell us. Doubtless we have all seen cases where the detached placenta was grasped and held very firmly by the uterus, and where the danger of rupturing the cord would be imminent if we were to attempt its removal by traction alone, but which could have been done easily if it had been done before such firm contraction.

Playfair would have us practice expression (Credé's method) alone, while Cazeaux says to make moderate traction on the cord, and if we meet with resistance, to wait a full hour, when if it still remains, we will be justified in interfering to remove it.

Other authorities and methods might be enumerated, but these will serve to illustrate the contradidtory opinions that are held by our leading writers. "When doctors disagree who shall decide?"

Each must settle this and many other medical matters for himself. In my opinion, the condition of the mother should have much to do in determining our mode of procedure.

Immediately on the completion of the second stage, if the uterus manifest a disposition to free itself of its now foreign occupant, it is my custom to aid it at once, not by either the Credé or extraction method alone, but by both combined.

With one hand wound up in the cord till I can easily reach the os with the finger, I make gentle traction on the cord, while with the other hand I grasp the uterus, making firm compression, while with the finger within the vagina, the edge of the placenta is brought down and rolled upon itself, thus facilitating its removal, as against permitting it to present its flat surface over the os internum, as it is liable to do if we rely upon expulsion alone, and as we are almost sure to have if traction alone is practiced.

On the other hand, if our patient is much exhausted, and with corresponding inertia of uterus, and no hemorrhage, we will wait a few minutes before offering any assistance.

But, suppose we have hemorrhage, or an adherent placenta, or both? I will tell you.

Some months ago I was hastily summoned by a countryman, who informed me that his wife had been delivered of a child, and was dying of hemorrhage. Losing no time in reaching her, a distance of four miles, the blanched, deathlike countenance on the bed, the almost pulseless wrist, and the pool of blood under the bed were their own interpretation. The mid-wife in attendance informed me she could not get the afterbirth, notwithstanding she had given ergot liberally. An examination disclosed a uterus tonically grasping an adherent placenta.

At this time the wasting was not very free, but persistent. I at once introduced my hand into the uterus, which was no easy job, on account of the uterine spasm, but by dint of perseverance it was accomplished, and the placenta

removed in fragments, it being impossible to detach it, on account of the extent and firmness of the adhesions. Retaining the hand in the uterus, I washed out the cavity with water so hot as to be painful to the hand, being careful to free it of every fragment and clot, following with a solution of listerine; following with this latter for a few days, patient recovered without a single unfavorable symptom, other than being a little tedious from her severe depletion.

We are told to give ergot in all cases just prior to the passage of the child. I cannot think this the best practice. Why not give digestives with every meal? Peradventure you may have indigestion if you do not. I think one about as much indicated as the other.

If a woman has been in the habit of flooding, or is of hemorrhagic tendency, it is well to give it as a precautionary measure, but I cannot consent to it as a routine practice, any more than to routine practice elsewhere. How are we to know just how many minutes will elapse before the delivery will be completed? I have seen many cases where the child was well advanced, and I could see no sufficient reason why labor was not speedily completed, but it was not, greatly to my disgust, as well as of my that patient, and I doubt not my experience is the experience of all. I have attended many women in confinement, to whom I did not give a particle of medicine from first to last, perhaps a laxative alone excepted. I am confident not a few of the cases of so-called hour-glass contraction we hear of are results of giving ergot, causing tonic spasm of the uterus, imprisoning the placenta within its walls.

My case above related was a case of uterine spasm, caused by ergot, but in this case it doubtless saved the patient's life, but in so doing it made it very difficult to relieve her, and in my opinion the greater portion of the trouble and danger might have been avoided had intelligent aid been at hand on discovery of retention and hemorrhage, instead of trusting to ergot to help them out of the difficulty.

We are also directed by men whom we all delight to honor, to explore the uterine cavity with the hand in all cases, to ascertain if any remnants of secundines remain, and to wash out the cavity with some good antiseptic. My advice is don't do it. Labor is a physiological process in all its stages, although it may become pathological—and in the great majority of cases would be accomplished as safely in our absence as with our aid. I grant that our presence and perhaps trifling assistance may, and does sometimes expedite matters, but that does not disprove my proposition. Irrigation is like ergot, good in its place, but it should have but small place, in the absence of some operative interference. The mother is more or less exhausted by her labor and loss of rest, and what she most needs now is quiet, quiet for mind, as well as body.

But how, think you, is she to obtain this rest if we fill her mind with anxious forebodings of impending evil, by our officious meddlesomeness.

Be it far from me to object to the most perfect cleanliness in the lying-in room, but we may obtain it without unduly exciting the fears of our patient. Let us not follow this routine treatment, but treat every case by itself, and if it needs no medicine, give none, but be ever ready to extend a helping hand, if nature falters or fails; but while she manifests a disposition and ability to perform a certain process, we will do well not to interfere or attempt to take the job off her hands, as the manner of some is. I may be considered by some as antiquated, behind the age.

If by objecting to "meddlesome midwifery" I merit the appellation, "so mote it be."

SYPHILIS.*

BY C. C. YEMANS, M. D., DETROIT, MICH.

My theme has no element of novelty to demand your attention. At the same time, what is syphilis? Can one define it better than in a circle, to say syphilis is syphilis? In all its multiform appearances a common feature is to be found, which we may essay to describe, but however one try to fit it to exact definition he will be thwarted or successfully controverted. Even a description will be shaded by the definer's notion of pathology. One step in syphilography is the differentiation of venereal ulcer which, however simple this step may seem to us, looking backward, was a step, or, rather, stride carrying with it untold good to the human race.

But what is syphilis? A communicable disease; a contagious disease having a contagium. Is it self-limited? Is it a fever, as the exanthemata? What is the contagium? Shall we use the classical word *virus*, which performs the function of concealing any definite notion? A virus which, gaining admission by some abrasion, disseminates itself throughout the body until by a rebound it again appears at the point of entrance in what we call primary lesion? Does it enter the blood to create devastation among the red blood-corpuscles? Is it a fungus, as some microscopists maintain, and essay to demonstrate its presence in the blood? However clearly this may appear to their mental vision the ordinary mortal fails to observe it with his eye, and finding the microscopist busy with things identical in other diseases, becomes truly skeptical as to the deductions. Is the essential element a degradation

*A paper read before the Wayne County Medical Society.

of leucocytes by contact with other degraded white blood corpuscles—a catalytic action producing simple hyperplasia resulting, by compact, in necrosis? Is there a bacillus syphilitica as there is a bacillus tuberculosis, as we are taught now-a-days, and to doubt which is rank heresy, as though it were simply a matter of faith? But granted a bacillus is found in syphilitic tubercle, is it the cause or the result of tubercle? So we may continue to wander among the theories of past and present, ever delighted, as we can imagine one in Herculaneum, not quite seeing but ever building in fancy and dreaming of the haunts and home of the renowned philosopher, SENECA.

Now, while we may not agree in answering the questions naturally raised when one says "syphilis," so we may not agree in answering what we shall do, confronted by a case we all concur in calling syphilis, *i. e.*, acquired syphilis, for with our theory of its pathology will the treatment be indicated, of course guided by the hand of experience—eclecticism? Can we successfully combat a disease more prevalent than consumption, more destructive than variola and more blighting than any other human ill? Can we limit its destructive tendencies to the individual so no vicious inheritance shall pass to one's progeny? With what remedies? Mercury, in some form, has been considered the best remedy ever since syphilis has been successfully treated. Hitherto it was given indiscriminately for venereal sores, including gonorrhœa. Often with disastrous results, as must have been.

The stages of the destructive processes of syphilis were noted and the older classification remains, and is practically sound and convenient, to wit: Primary, secondary, tertiary.

By common consent the chancre is designated as primary. It certainly is primary, so far as apparent lesion is concerned.

If the theory of a "syphilitic virus" is true, chancre would not be primary in fact, but still, as this subtle impression cannot be traced, we may correctly say "primary lesion." Now, as to the lesion, what shall its treatment be? Shall it be active, or shall it be conservative? Excision has been advocated and practiced, but is no more generally followed. If syphilis is self-limited, as some affirm, how can the utility of this method be demonstrated? Again, if chancre is a hyperplasia only, as seems reasonable, shall we not administer mercury and control the disease before a general infection occurs? This question is answered yes and no, with the weight of evidence, as it seems to me, in favor of the negative. Can one safely predicate of induration, etc., syphilis? Or is general infection sure to follow chancre? Certainly, it seems to me safe to treat syphilis only when it is demonstrably present. If, however, one is to treat chancre medicinally, some one of the salts is of mercury is indicated. Mercury is indicated because of its well-known quality of producing resolution where true hyperplasia exists, and not for any quality it may have of influencing red blood-corpuscles.

Regardless of the reasons given for exhibiting mercury I think we all shall agree from observation, that if any treatment is instituted it should include mercury.

Secondary syphilis opens a contested field where men differ in practice, sometimes without scanning the reasons very closely, to ascertain the reason for differing. A drug has come to be prescribed in large doses, often to serious injury to the patient and, *a priori*, with little to recommend it—potassium iodide.

The secondary lesions are multiform. The syphiloderma assume the physical outlines and appearances of nearly all skin lesions—Papular, Pustular, Squamous—yet having some feature in common by which it is designated as syphilis. Rationally mercury is indicated before and above all remedies in the secondary stage, preferably the proto-iodide. Potassium iodide is as plainly indicated in the stage of necrosis or the tertiary stage, but are not the conditions essentially different? Indeed, is the tertiary stage syphilis, in any correct use of the term? Is it not rather a sequence or consequence of syphilis? Let me go back, however, to suggest that we err in overlooking this important difference and in the treatment of the same.

Why give potassium iodide in secondary syphilis? Why is it necessary to exhibit so large doses continuously for so long a time? The drug produces impotency in many cases.

Treatment.—First the primary lesion is not a sufficient warrant for exhibition of mercury, for syphilis may be self-limited and should the apparent primary lesion be some other lesion, harm may ensue. Neither, in my opinion should caustics be used in single, indurated chancre.

Second, when a diagnosis of syphilis is made out by certain characteristic signs, mercury should be exhibited. The prevalence of "mixed" treatment may be misleading, as the apparent usefulness of the same may be conditioned entirely on the presence of the mercuric iodide or rather biniodide, potassium iodide doing no good but rather harm. Are we not giving far too freely of potassium iodide and bromide?

In the tertiary symptoms, where solution of continuity has taken place and necrosis has occurred, we find iodide of potassium very useful. This is a matter of common knowledge, but does it follow that this salt is indicated in secondary syphilis? I think not, and for two reasons: 1st. I see no indication (good old word) for its use. 2nd, I think we have not

clearly demonstrated its utility, while mercury seems adequate, in some form or mode of exhibition, for all cases.

May it not be true that our empiric use of mercury may be the fortunate coincidence of practice, unwittingly based on sound pathology, *i.e.*, that syphilis is a hyperplasia? Mercury causes a resolution of degraded leucocytes, unlocking the lymph spaces and banishing the offending degradation to the point of perfect health.

Is syphilis curable? Yes. A patient came to me with marked secondary lesions which had resisted treatment for a long time. He had taken large doses of potassium iodide and still the syphiloderma persisted, and he was perfectly impotent besides. In six months on ¼-grain doses of hydrargyrum protoiodidum his secondary lesion was gone and his virility restored. Evidently his impotency was caused by potassium iodide.

A patient, a physician, who had been inoculated during a surgical operation came to me with secondary lesions and general alopecia. He was put on ¼-grain doses of mercuric protoiodide three times daily, and very soon gave evidence of improvement. His hair was restored and he became apparently well. Now, what causes syphilitic alopecia? Were the lymph spaces around the hair follicles crowded with degraded white blood-corpuscles, the nutrition thus cut off, the hair thus killed? When these lymph spaces are unlocked by the resolvent force of mercury, the cylinder of hair is again produced by natural process. May not this little summary be the true pathology of syphilitic tubercle?

I will not predict of these cases the universal application of mercury to secondary syphilis, neither will I affirm the uselessness of potassium iodide, but I may ask, is it wise to give the latter indiscriminately? Physicians are gregarious and follow often a leader without enough questioning. Witness the recent applause for DR. KOCH, and while yet sanitarians accept all his teachings with deductions, serious-minded men are in doubt concerning the truth of either.

So it has ever been in science and theology. May it not be true that the word "progressive" covers a multitude of sins, as in so-called Antisepsis, while to look for the old paths is often wisdom? So I sing the praise of mercury and hope, if in error, to receive your pity not your blame.

SPINAL IRRITATION.

BY A. J. ROSENBERRY, M. D, WAUSAU, WIS.

The disease described under the above title by DR. W. A. HAMMOND in his work on "Diseases of the Nervous System" is one which must be relatively infrequent, as very few authors describe it, and among the physicians of my acquaintance is generally disbelieved in. E. C. SPITZKA in his article in Pepper's System, on Spinal Hyperæmia says in substance: "The majority of writers now classify under the non-committal titles of spinal irritation and neurasthenia the disorders once designated as spinal anæmia and hyperæmia." Evidently DR. SPITZKA does not have a very firm belief in the existence of spinal irritation as a distinct affection. SPITZKA makes the further statement that "Spinal anæmia will but rarely present itself as a subject for special and separate treatment." Now as HAMMOND gives the pathology of spinal irritation to be spinal anæmia of the posterior columns, there would seem to be a radical difference of opinion between these two eminent neurologists as to the existence of the affection under consideration. It is incredible that a man of SPITZKA'S wide experience should not have met with cases presenting the group of symptoms which HAMMOND ascribes to spinal irritation. Just how SPITZKA would treat them I do not know, all of which may be my fault. At any rate I have found HAMMOND'S classification to be a very practical and useful one, as I propose to show by giving symptoms and treatment of two cases. Not that these two are the only cases I have had, but are the most marked cases.

Case 1.—On February 2, 1887, MISS. M. S., aged 21 years, a dressmaker by occupation, who had followed her calling very assiduously for two or three years, consulted me about certain symptoms which had annoyed her some time, notably nausea, and neuralgic pains about the chest and shoulders. I prescribed for her after a cursory examination, thinking it an ordinary case of catarrh of the stomach. February 7, five days later, I was sent for and on further questioning ascertained the existence of other signs and symptoms, making the diagnosis of spinal irritation unquestioned—these were as follows: Marked tenderness over the spinous processes of several vertebræ, the lower cervical and upper dorsal, neuralgic pains in chest and shoulders, nausea and vomiting, and the existence of well-marked delusion, which assumed the form of delusions of persecution; three or four days later these became very strong. She refused the medicine, and secretly poured out the medicine (carbolic acid and bismuth in a fluid), and substituted milk, declared her foster-mother (she was an adopted child) was trying to poison her by means of poisoning the butter, refused butter and all articles containing it, and for a few days was quite intractable. Her temperature at this time varied between 99° and 100°. The pulse was slightly accelerated.

The treatment consisted of blisters to the portion of the spine which showed tenderness on pressure of the spinous processes. Extract

nux vomica with the phosphide of zinc, as directed by HAMMOND, and the occasional use of bromides and chloral to secure quiet sleep. Within one week the nausea and vomiting disappeared, the pains began to diminish, the delusions gradually lost their vividness, and within ten weeks recovery was complete. Faradic electricity invariably aggravated the symptoms. The galvanic battery was not used, as I did not then possess one in working order. The blisters seemed to produce a marked improvement, and were repeated probably a dozen times.

Case 2.—Mrs. F., a young married woman who had borne three or four children, called me to attend her on May 18, 1887. I found that she had been treated by a regular physician for "womb trouble." She had been under his care for fifteen months, twelve of which had been continuously spent in bed. A slight laceration of the cervix existed, which had been unsuccessfully operated on. Her symptoms had been attributed to her womb trouble, and the treatment had been directed to that organ, with, I suppose, negative results. At any rate I found her in bed, where she had been for twelve months. Her symptoms were as follows: Headache, dizziness, nausea, not nearly so prominent as in Case 1, and irregular pains about the chest and abdomen, almost total loss of appetite, irregular action of the bowels, coated tongue, uneasy unrefreshing sleep, an unaccountable nervousness and the usual disheartening tone and manner of a bed-ridden woman. I made several (three or four) visits before I discovered that there was tenderness of the lower cervical and nearly all the dorsal vertebræ. I instituted HAMMOND'S treatment, with the satisfactory result of getting her out of bed in four weeks, and in eight weeks she was able to and did her household work, and has continued to do so till the present time.

The womb treatment consisted in the use of hot water injections followed by a solution of tannic acid with the chlorate of potash, which sufficed to relieve a leucorrhœa from which she was suffering. The headache and dizziness were relieved by antipyrine freely used, bowels were regulated and other minor matters were of course attended to. This case is, I think, illustrative of a large class of cases where such symptoms are almost invariably attributed to womb disease, usually laceration "with imprisonment of the nerve filaments in the cicatrix" as most authors on gynecology explain, the nervous manifestations accompanying spinal irritation. Whether the laceration stands in a causal relation to the spinal irrita- I do not know, but this I know that the symptoms of spinal irritation being present, treatment directed thereto improves the condition of the patient, which I regard as quite an important consideration.

Whether SPITZKA acknowledges the correctness or not, of HAMMOND'S classification makes no difference to me. I know that the classification and treatment have been of great assistance to me, as without it I certainly should not have recognized and treated these cases with the desirable results here given. I believe the disease often totally escapes recognition.

CONSERVATIVE SURGERY.

BY A. J. ROSENBERRY, M. D., WAUSAU, WIS.

My professor of surgery was in the habit of saying, eight years ago, that "conservative surgery" was "good surgery." In the cases of which I am about to speak it proved to be eminently so, but I am afraid that it would not have been so regarded by the men who have gone mad on the subject of microbes, germ-laden air, etc. PROF. SAYRE says he does not fear air but he fears imprisoned air, but in my case even imprisoned air did not prove injurious.

Case 1.—On Nov. 22, 1887, J. G., a noted horseman, was driving a colt about town attached to a two-wheeled cart; the colt kicked, and one of the shoe-calks struck the inner side of the right leg at the head of the tibia where the synovial membrane of the knee-joint reaches its lowest point, and opened the knee joint; happening to be driving just behind him at the time, but not knowing the nature of the injury, I suggested to him that he drive home the quickest and easiest way, but his blood was up and he insisted on driving the colt to the stable. On examination, the nature of the injury being made out, I at once ordered him to bed. He was not at all inclined to obey the order, but after several appeals I finally prevailed on him to go to bed. Adhesive plaster was procured, a splint prepared, and after sealing the wound a posterior splint was applied and the limb securely bandaged to it. I immediately called another practitioner in consultation; he agreed with me as to the great gravity of the case. Quite a quantity of synovial fluid had been evacuated from the joint and the presence of air in the joint was easily demonstrable, the succussion sound was produced upon flexion and extension of the leg, and there was an abnormal fulness of the joint. Preparations were at once made for combating the expected synovitis, ice-bags were held in readiness and developments anxiously awaited, and I am pleased to say that the expected developments failed to appear; eight days after the injury, the joint was aspirated to draw of the imprisoned air but without success; about two ounces of bloody synovial fluid was drawn off; on the ninth day a plaster cast was applied from the end of the toes to the middle of the thigh; this was left on until about three weeks

after the injury, when the patient removed it and went about his business; there never was any pain, redness, elevation of temperature or pulse. Of course I do not pretend that a general law shall be deduced from this case, but it seems to me instructive. The air and blood must mave been absorbed from the synovial sac.

Case 2.—L. S. came into my office on the 26th. of Jany. last with his left thumb nearly severed from the hand; he had been splitting wood, holding the axe with his right hand and slab of wood with his left; the point of the axe had entered the tissues of the thumb on the dorsal surface and passed clean through the thumb, making a gash on the palmar surface one and a half inches in length; the metacarpal bone of the thumb was severed about one inch from the carpo-metacarpal articulation. The gash was certainly extensive; about all the tissue that connected the thumb with the hand was a bridge of cuticle about one inch in length between the thumb and index finger and another on the posterior part of the ball of the thumb, between which was the incision made by the corner of the axe in its passage through the thumb. I was appealed to to save the thumb, and after assuring him that the probabilities were that he would eventually lose it I sewed it on, with some eight or ten stitches, sprinkled iodoform freely over the incision and dressed it with absorbent cotton; the hand was dressed again in three days, after which it was dressed daily. In two weeks complete union had been effected, though after considerable constitutional disturbance; a septic or pyæmic synovitis of the ankle-joint supervened which made some trouble but finally subsided, and recovery is now complete. I have not yet ascertained just how much motion there is in the thumb. I am aware that my description of the cut as it appeared when I first saw it fails to convey an adequate idea of the extremely slight connection which existed between the thumb and hand. It was very nearly completely severed—but as the circulation was still good and the owner was very desirous of retaining his thumb I consented, with many migivings, to make the attempt. I have on two other occasions succeeded in securing union when the third phalanx of a finger was severed except a small strip of skin not over one quarter inch in width. I think the limits of conservative surgery are scarcely realized in our ordinary daily work—especially conservative surgery of the extremities.

A method for relieving epistaxis, credited to JONATHAN HUTCHINSON, consists of immersing the feet in hot water, as hot as it can be borne. It is said to always cure.

Correspondence.

ANTISEPTIC MIDWIFERY.

A recent article of mine on "Antiseptic Midwifery," which appeared in the AGE, and for which I have received many valued private letters of commendation, seems to have struck the mug of DR. CUPP, of Metamora, Ind., on the bias; at least I infer that from his letter in the last issue of the AGE. Now, while I have no contract with the editor of this excellent journal to furnish comprehension for his readers, as well as "copy" for himself, and, while I never allow myself to reply to an article which misquotes and garbles my language in such a horrible manner, and, while I am willing to put a charitable construction on the "doctor's" article by presuming that he is still in his professional swaddling clothes and consequently not altogether responsible for whatever of seeming nastiness, his production contains, still I want to tell a story which the doctor reminds me of:

An old widow lady, who had a family of grown-up sons and daughters comfortably settled around her, all at once felt the slumbering fire of love kindled by the attentions of an old resident of the neighborhood, and, at last, when the old man proposed she accepted him. About this time her sons, who had farms and families of their own, interposed an objection to the match, on the score that she was too old to think of such a thing But the old lady was obstinate. Finally, it was agreed between her and the boys that they would put the old man astride of the barn, and if she could see him from the road as she walked by they would withdraw their objections. So, with much difficulty, they got the old man in position and walked the old lady slowly by.

"Mother," said one of the sons, "can you see the old man?"

"Oh, yes!" said the old lady, rubbing her hands gleefully, "I can see him *perfectly plain*, but where is the *barn?*"

E. B. WARD, M. D.

LAINGSBURG, MICH., March 6, 1888.

Permit me to say that, in my opinion, DR. WARD is partly right in his views and partly wrong as well.

He is right in not using antiseptics in all cases.

He is partly wrong in not using them at all.

DR. WARD, if he desires to save himself from blackmailing malpractice suits, will do well to use antiseptics in the future. Should he refuse such good advice, some of these days the shysters will "put up" a job on him and get a judgment against him, examine him under supple-

mentary proceedings and the blackmailer will get his money and he the experience.

LUIGI G. DOANE, M. D.

NEW YORK, N. Y.

Being an extremely sensitive man, and a timid withal, I avail myself of the privilege of expressing my opinion on the question of the employment of antiseptics in labor, over a *nom de plume*. It is unfortunate that a man may not express himself on a scientific question without having the tenor of his remarks misconstrued, or having himself held up as occupying a ridiculous position. The indisputable facts of medicine are too few to justify an attempt to prevent a discussion, and no man's arguments, when they are at all reasonable, should be scoffed at. The bearing of this preface on the article on Antiseptic Midwifery, in the AGE, by DR. E. B. WARD, and the reply thereto by DR. M. F. CUPP, may or may not be apparent.

DR. WARD, in my opinion, did a good work when he called attention in his own peculiar, but effective, way, to the "antiseptic craze" which has found its way into midwifery, and DR. CUPP exhibits a deficient faculty for the appreciation of a joke, when he holds DR. W. to literal responsibility for his statements. I should never suspect for a moment that our Laingsburg friend would deliberately anoint his hand in septic filth in preference to carbolized vaseline, before introducing it into the uterus.

The point of discussion is the wisdom of holding the parturient uterus and vagina to be incapable of withstanding the onslaught of the micrococci with which the atmosphere is laden. Doubtless (for I am not too much of a skeptic) the entrance of these organisms into the system may, in the case of those who present suitable soil, cause septicæmia, but, unquestionably, nature has provided a means of preventing their ingress, and it is only exceptionally that they escape her vigilance. Women have been bearing children since the beginning (for how many milleniums we know not), and the fact that the children and their mothers survive goes to prove, to my mind, that the adaptation of the woman to her environments (including all the various cocci) is, in the beautiful economy of nature, quite perfect. Unless, therefose, there be some special reason for artificial precaution, as, for instance, the extensive solution of continuity through operative interference, I prefer to let nature take care of her own in the lying-in chamber.

SENEX.

A TONSILLAR EXUDATE—WHAT IS IT?

Will you be kind enough to allow me the use of your columns concerning a matter that has puzzled me somewhat, and, perhaps, has been a source of uncertainty to others. We are having an epidemic of influenza. Some cases are very mild, others quite severe. Commencing in the upper air-passages as an acute nasal catarrh, it has in many cases extended to other parts, and croup, bronchitis, pneumonitis, pharyngitis, of a sometimes fatal character, have in many cases marked its course. Catarrhal angina is not an uncommon manifestation of the disorder, but among the cases of this character has occurred an occasional one of more severe, and of a somewhat different character.

Chilly sensations, rather than a chill, have usually marked the onset of severer symptoms, perhaps preceded for a day or more, by slight soreness in the throat. A fever follows the chill, the temperature reaching 102° to 103° in in some cases; soreness of the throat much increased; sometimes much complaint of aching in back and limbs; not much swelling of glands in the neck and underside of jaw; soft palate not swollen in some cases, and considerably so in others; tonsils little, if any swollen.

The first or second day there appear, on the inflamed mucous surface of one or both sides, patches of grey or white exudation or membrane, from the size of the little finger-nail down to that of the surface of a rice grain. These may occur on one or both sides, and, so far as I have observed, they are apt to be at the base of the tonsil and posterior to it. Often the appearance is similar to spots of milldew, and sometimes these seem to be distributed at different points on the surface of the tonsil. These spots are very distinct; they set upon the surface of the mucous membrane and need not be mistaken. They are not mucous accumulations, neither are they the curdy deposits of stomatitis.

Just here I hope no professional brother will take the trouble to arise and explain that they are the secretions, or deposits, of follicular tonsillitis. The tonsils are often not swollen and the exudate does not resemble that deposited in the furrows of these glands when inflamed. The tongue is furred in some cases, in others little, if any. I have sometimes noticed an unpleasant smell in the room where the patient lies; at others I have noticed none. These cases have yielded very readily to treatment, or to nature. Often in from three to five days from the initial fever the child is nearly as well as ever. The redness goes out of the throat. The exudate goes off rather more slowly. Appetite returns, and the patient has apparently suffered little inconvenience from the attack.

Are these attacks diphtheritic, and should they be reported to the Board of Health? That very many physicians do not report them, I am sure, and seem to regard them in anything but a serious light. I have seen a great many of these cases, occurring in the midst of cases of undoubted diphtheria, and also in situations and neighborhoods where more serious cases

have never been known. No constitutional depression marks the onset or course of the affection, and no infection or contagion seems to follow, whether precautions are taken in that respect or not.

Now anything on diagnosis will be thankfully read, if sent through the AGE. Please don't fill space with treatment; I have more of it than I know what to do with.

H. B. LUDWIG, M.D.

RICHLAND, MICH.

TWO CASES OF PLACENTA PRÆVIA.

As reports of cases in your journal have been of great service to me, I thought it not out of place to send an item bearing upon cases which we occasionally meet.

CASE 1.—Mrs. B., æt. about 30; second pregnancy; was called in consultation with another physician on evening of Oct. 1st, 1887. Learned from attending physician that the patient had been suffering from uterine hæmorrhage for several weeks, more or less every few days. Found os dilated to about the size of a silver dollar. The hæmorrhage continued despite the tamponing with sponges and strips of cloth. After waiting about an hour and finding the os sufficiently enlarged, I inserted the hand, detaching the placenta upon one side, turned the child and delivered, leaving the head lodged in the pelvis twenty minutes, to check hæmorrhage as much as possible. The placenta came away with the fœtus. The patient continued to sink, and died two hours after delivery. Pregnancy was seven months advanced. Delivered under chloroform anæsthesia.

CASE 2.—Mrs. W., æt. 35 years; third pregnancy; was called morning of Feb. 11, 1888, to find that patient had lost a pint of blood in the two to three minutes that the hæmorrhage continued. The husband had tamponed with a silk handkerchief saturated with sweet oil. Thinking it not best to disturb the patient, left some powdered per-sulphate of iron to be used on a second tampon if necessary. I informed them if anything like this last hæmorrhage should occur again, an immediate delivery would be necessary. Thirty hours afterward I removed the tampon without further loss of blood and could detect, upon examination, the placenta covering the entire region of the cervix. Was called again Feb. 15, about midnight and found the flowing more severe than before. The husband failing to tampon successfully, caught the patient by the feet and was holding her head downward. Allowing her to resume the recumbent position, inserted my hand into the vagina and found the os sufficiently dilated to crowd the thumb and index finger into the opening, and by crossing and flexing them form a perfect tampon.

This method of tamponing served two other purposes. By adding the other fingers, one at a time, in half an hour I was able to pass the hand through the os, efficient labor pains coming on in the meantime, having been entirely absent before. Now making a rent in the placenta near its center I turned the fœtus (a six months') and delivered as in the former case. Immediately tamponed with strips of cloth covered with Monsel's powder, and was gratified to see the case proceed favorably.

Eighteen hours after, upon disturbing the tampon for the purpose of catheterization, I was surprised to see the blood start freely. Applied more per-sulphate and thirty-six hours after delivery removed the tampon, and twelve hours later began using vaginal wash. Delivered without anæsthesia. The patient at this writing, March 3rd, has nearly recovered. She had suffered from hæmorrhage since the fourth month, but I did not see her as she was visiting somewhere in Canada.

A. J. COLLAR, M. D.

LUTHER, MICH.

A CASE ILLUSTRATING THE PROPER MODE OF ADMINISTERING CASCARA SAGRADA.

I find that physicians who have been unsuccessful in the use of cascara sagrada, are, as a rule, those who have given a single large dose, and failing to get an action from it have abandoned the drug as unsuited to the case under treatmet.

Now, if the physician would but remember that cascara sagrada is not a cathartic, but a mild, tonic laxative, requiring to be given in small and frequently-repeated doses, he will avoid much disappointment. I give my patient to understand that his constipation is of a nature which may require a long course of treatment, but that if he will persevere the result will prove satisfactory in the end.

To better illustrate my ideas I will cite a typical case: MR. M——, aged 30 years, occupation book-keeper, has been a sufferer from habitual constipation for 15 years, unable to have a movement without taking medicine. Has taken various cathartics and laxatives without any permanent benefit. December 23, 1887, I prescribed cascara cordial, a teaspoonful before each meal and at bed-time. At the end of the third day he had a full evacuation of natural consistency. The dose was continued at the same intervals for a week longer, producing at that time two rather liquid stools a day. I then directed only two doses (of a half teaspoonful) per diem, before breakfast and on retiring. This was continued for about two weeks longer, when it was left off altogether and he has no further trouble.

This, I believe, fairly represents what would be the result in most of the uncomplicated cases

of habitual constipation. I prefer the above preparation of cascara inasmuch as it is very palatable, and at the same time efficient in action. I, furthermore, prefer a liquid remedy in those cases, as the dose can be adjusted to meet the indications, a consideration which should not be underestimated in the use of cascara sagrada, which will accomplish so much in small and decreasing doses.

A. L. PERRY, M. D.

NEW YORK, N. Y.

ANTIPYRINE.

In quite a number of cases of hemicrania, I have used antipyrine in 15-grain doses, and usually one dose will relieve; if not I repeat the dose in four hours. As an antipyretic I used it last summer in numerous cases of typhoid fever, with the result of controlling the temperature and in every case it did good service. Of course it is necessary to pay attention to the iodiosyncrasies of the patient. I used it in one case of infantile convulsions in which there was high febrile movement. The child being 16 months old, I gave it five grains at a dose. The fever abated and the child had no more convulsions. I believe that antipyrine and antifebrine are worthy the consideration and study of every physician, for it seems to me that they are the great antithermics.

In pneumonia antipyrine acts like a charm in the first stage. Children require proportionately a much larger dose than adults. As a hypnotic it may often take the place or morphine.

J. Z. SCOTT, M. D.

SCANDIA, KANSAS, Feb. 23, 1888.

LEA BROTHERS & Co., of Philadelphia, will shortly publish A Clinical Atlas of Venereal and Skin Diseases, including Diagnosis, Prognosis and Treatment, by PROFESSOR ROBERT W. TAYLOR, M. D., formerly President of the American Dermatological Association, and Joint Author of Bumstead & Taylor's Pathology and Treatment of Venereal Diseases. The work will be issued in eight parts, aggregating 58 large folio chromo-lithographic plates, measuring 14x18 inches, and containing about 200 figures, many of them life-size, executed with the utmost faithfulness and beauty of detail. These plates will delineate typical cases from the practice of the author, and selections from the entire literature of Europe, including among others the works of Cullerier, Fox, Fournier, Hebra, Hutchinson, Kaposi, Neumann and Ricord. The text will deal chiefly with the practical aspects of the subjects, and will be illustrated with a series of unusually large engravings, executed especially for this work, and drawn principally from original matter in the possession of the author.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., MAR. 10, 1888.

Editorial.

POPULAR MEDICINE.

The number of treatises on medical subjects designed for popular reading, from the pens of reputable members of the medical profession, and the frequency of the appearance of new works of a similar character, are sufficient to raise the question of the propriety of such literature. We often hear it urged that the only hope for the elevation of the profession of medicine in the appreciation of the public, and the only means of bringing the people to regard properly qualified practitioners with that respect which is their due, lie in the education of the masses. To this end the profession are somewhat zealous in the matter of urging the study of medical subjects in the schools, and of disseminating the literature above referred to. Men whose names carry weight in the profession have not thought it incompatible with their standing, or in the least unethical, for them to prepare for popular distribution semi-professional treatises on various diseases, couched in language adapted to the comprehension of the lay reader. Some, of course, resort to this as a method of advertising themselves, but we do not refer to such; they clearly merit condemnation. In questioning the propriety of this sort of literature, we have in in mind only that which is honestly prepared for the purpose of educating the public. And granting that it does thus educate, is the education profitable for either the public or the profession?

A fitting answer to the above question might be given by simply referring the practitioner to one of the "intelligent" female patients which he has in his clientele. For our part our fervent prayer is: from your knowing woman who talks to you of her ailment in technical phrases, good Lord deliver us. As a rule such patients are homœopaths, and the lot of the regular practitioner is thus, fortunately, not as hard as it might be. Knowledge is the remedy for the bulk of human misery, but a little of it in medicine is a dangerous thing. Here, if anywhere, the draught must be deep in order to be

a benefit, and not a curse to the drinker. Such knowledge of medicine as can alone fail to prove harmful in its practical application, must have its foundations laid deep in a familiarity with the elementary structures both of the body and of the agents which are calculated to affect them and their functions. Without such familiarity with the body and its functions, diagnosis, the very essence of correct practice, is impossible. It is the difference in the powers of diagnosis which marks the difference in the success of practitioners in the matter of treatment, and the attempt to impart a knowledge of medicine to one absolutely unqualified to make a diagnosis, is not only ridiculous in the extreme but also positively dangerous.

This subject, it appears, has also been attracting the attention of the profession in England, and the Lancet animadverts as follows thereon:

Personal examination and skilled diagnosis are as absolutely essential to the successful use of remedial measures as the remedies themselves. They are, indeed, even more essential, for though a given form of treatment as expressed in drugs and the like, may be dispensed with and substituted by some other, the fundamental principles which distinguish between the proper and improper use of all such remedies cannot be thus lightly used. They are incorporated with every detail of practice, and requiring as they do, for a just understanding of their significance, a sound knowledge of all the sciences subsidiary to medicine and of medicine itself, it is impossible that they can be duly appreciated or applied by any man save the trained and qualified medical practitioner. We have, therefore, no hesitation in condemning as hostile to the well-being of the lay population, as it is obstructive to the better purposes of judicious practitioners, the effort of more than one semi-medical journal to secure a credulous public against the need of medical attendance by offering such fruitless half-knowledge as can be communicated through the popular press. It is, we assert, impossible to treat the serious reponsibilities of practice as if they were mere accessories to general education. Medicine is, probably without exception, the calling for which an accurate and lengthy professional training is absolutely indispensable, in order to justify its practical application. It is not merely read up from a book or learned from popular lectures. It is no mere joinery or smith's work with tools and material—no matter of common shrewdness or business capacity, such as the mind of any capable and industrious man may compass. It deals with structures the most delicate, highly organized, and sensitive, which the mind of the Creator has contrived, with tissues rendered interdependent and intersensitive by the most intricate anatomical and physiological relations. Above all, it takes in hand the great question of life and death, and assumes the high privilege of determining the course of the disease. Is all this to be lightly committed to a body of unqualified laymen, simply on the ground that they can read and think? Yet this is the real issue of the late new departure in popular medical journalism. We would not at all fetter the free exercise of opinion in the matter, but would only ask that justice may be allowed a voice in the minds of those who possess it.

PEROXIDE OF HYDROGEN AS A REMEDIAL AGENT.

There has been occasional reference in the medical journals during the past few years to the value of the peroxide of hydrogen as a therapeutic agent, but we assume, partly from inquiries which we have answered in private notes to readers, that there is not that familiarity with the drug which its importance merits, and, indeed, demands. DR. I. N. LOVE, of St. Louis, therefore, does a good work by contributing an article on the subject to the Weekly Medical Review, in which he goes somewhat into detail in the matter of the therapeutic application in a number of affections in which he has found, from his own experience, that the drug is valuable.

Peroxide of hydrogen, DR. LOVE tells us, was discovered by THENARD, in 1818, by adding dilute acids to peroxide of barium. Its formula is H_2O_2. It is a colorless, transparent, syrupy fluid, having a specific gravity of 1452. The commercial peroxide of hydrogen is a 3-per-cent. aqueous solution, and is largely employed in the arts, for bleaching animal products, accomplishing oxidation very rapidly. It decomposes on exposure to sunlight—a fact of some practical importance, and to be remembered in prescribing the drug.

DR. LOVE gives his experience with its use in scarlet fever, diphtheria, purulent ozœna, acute coryza, whooping-cough, reflex asthma, follicular tonsillitis, and cancer of the womb. In an illustrative case of diphtheria he diluted it, one part in two of water, for application to the nasal passages by means of a syringe, and used it in its purity, by means of probang and absorbent cotton, to the pharynx.

He soon had the satisfaction of seeing the pus and accumulated mucus cleaned off from all the surfaces as if by magic. The child was a bright little hero, and though semi-delirious he helped materially in its application and also in the removal of the oxidized purulent matter. The nasal passages, front and back, were soon cleared out, and the fauces as well were kept in a comparatively cleansed condition. A good opportunity was

now presented for applying the solution in its purity to the membrane direct and the disintegration of the same was accomplished after repeated applications in a very decided manner. Wherever the solution came in contact with organic matter a marked effervescence and bubbling ensued and a breaking down of the accumulation or exudation, and throwing off the same occurred.

The beneficial effect of the application was apparent: all the distressing symptoms were much abated, and within three or four days they had passed away.

One thing quite noticeable was the fact that the constant spasmodic cough subsided after the removal of the purulent secretions from the nasal passages. The success in this case was similar to that in six other cases. This child was in a most dangerous condition for many days and nights, and while the doctor does not claim that the peroxide of hydrogen saved him, it certainly helped to do it in that it enabled him to combat the local poison, acting as an antiseptic, a germicide of the most pronounced character, a remover of purulent septic matter and offensive odors, aiding in the conservation of comfort to patient and attendants.

The strength of the application in the other affections named was from one to six, to one to four. The conclusions drawn from the results in the cases reported are:

1. The peroxide of hydrogen is a most efficient means of cleansing purulent surfaces, deep cavities and sinuses and stimulating the healing process in ulcerating parts.

2. As a destroyer of microbes it is of great value as a local application in diphtheria and scarlet fever, ozæna, coryza and whooping cough.

3. For the above reasons, it should prove of value in gonorrhœa, hay fever and similar disturbances probably dependent upon a specific germ.

AMERICAN MEDICAL ASSOCIATION.

The approaching annual meeting of the American Medical Association is fixed for May 8 to 11, inclusive, in the city of Cincinnati. The profession of the honored city are making preparations in anticipation of one of the largest meetings in the history of the body. The citizens, too, feel gratefully the honor which is in store for them in this great gathering of the representative men of the country, and can be depended on to furnish entertainment of a social nature which will be quite in keeping. They have apparently, somehow, got the impression that doctors are not the dry-as-chip specimens of humanity whom they are in the habit of encountering when other bodies of scientists swoop down upon their fair city in annual convention, and they have, we are given to infer, taken steps to provide such entertainment as gratifies the human element in the man. This is just as it should be, and it is hoped that the occasion will prove that all the (jaw) bones of contention, and hatchets, and the other disagreeable weapons of attack and defense (sneers, inuendoes, etc.), which have been so conspicuous during the past three or four years, have been buried so deep under the success of the late International Medical Congress, as to be forever beyond the power of resurrection. Let us have peace. The sensation at an annual meeting of the Association would certainly possess the charm of novelty.

The times are auspicious for a grand reunion at Cincinnati next May, and if the proper growth of the spirit of "meet-me-half-way" shall be cultivated in the meantime, the meeting will be a memorable one. The warring factions have had a fair test of each other's strength, and have demonstrated that each is foeman worthy of the other's steel. They have demonstrated, too, that neither is essential to the other's existence, but that, if need be, each can stand alone, without the other's support. This is well as far as it goes. It shows the great strength of a body which even when divided shows no weakness. But strong though it be, it certainly gains nothing by division, and now is the time for the elements to again cohere into the original mass. The sensible, broad-minded men of the profession will, under the circumstances, reunite, and letting the dead past bury its dead, will go to the next meeting with a fixed resolve to join forces for the common good. So mote it be.

FREE TRADE IN SURGICAL INSTRUMENTS.

The Georgia State Medical Society, at its meeting held January 3, last, adopted a resolution requesting Congress to remove the import duty on medical and surgical instruments, and requesting the co-operation of the medical press and medical societies in securing such legislation. The reasons for the removal of this duty will suggest themselves to any one who will give the matter a moment's thought. On general principles we believe in fostering home industries by a judicious protective tariff, but none of the arguments which can be urged by the most zealous protectionist are sufficient to justify a tax so directly levied on suffering humanity as is the duty on surgical appliances. The practical operation of this duty for a long term of years has, moreover, demonstrated its inefficacy as a means of improving the quality of surgical instruments of American manufacture. The only possible justification for its continuance is, therefore, thus removed. Singular as it may appear, our home manufacturers have not been able to compete with the foreign

makers in the quality of their products. There seems to be something in our atmospheric conditions or in the quality of our water which prevents the "temper" in domestic instruments which is possessed by those of European manufacture. The existing duty, therefore, makes it possible for home manufacturers to fix high prices on inferior articles. While, doubtless, this is a decided benefit to them the injustice to those who are obliged to patronize them is very flagrant. We have ransacked our brain in vain, for some sort of a justification for the continuation of the existing protective tariff on this line of manufactures. It would give us pleasure to discover some such justification, for, as we have intimated, we are on general principles a protectionist. If any of our readers can furnish us with an argument with which to prevent our departure, even in this particular instance, from views which we have taken pleasure in advocating in the political arena, we should be pleased to hear from them. Until then we shall continue to cordially endorse the sentiment enunciated in the resolution of the Georgia State Medical Society, above referred to.

Notes.

The Alumni Association of the Detroit College of Medicine has blocked out for itself something in the line of practical work, and among other questions on which it contemplates action are the following, to wit: "The proposed removal of the Medical Department of the University, either wholly or in part, and uniting it with the Detroit College of Medicine;" "the character and location of the new building to be erected soon by the College;" "the sale or retention of the present building;" "the establishment of a preparatory school;" "the raising of the standard of scholarship, both for matriculates and as a requisite for graduation," etc. It is not often that the Faculty and Board of Trustees of an institution are thus assisted in the solution of knotty questions by graduates. As a rule graduates are too much occupied and concerned with their own private affairs to permit so much interest in the practical workings of their *almæ matri*. The Detroit College of Medicine is, therefore, to be congratulated. The next meeting of the active association alluded to will be held on the 20th inst.

The health of the peasantry of Ireland furnishes an argument against the supreme importance of cleanliness, so much insisted on by sanitarians. In a lecture on Ireland, CHAUNCEY M. DEPEW says: "Children swarm everywhere, for the marriage bond in Ireland is a coupon bond, and they cut one off every year. I said to a distinguished English sanitarian, 'see how these people live, and what pictures of health they are, while we in New York are ventilated upon a new principle every month, and in fighting sewer gas squander our incomes and become the abject slaves of the plumber. How do you account for it?' 'Well,' said the nonplussed scientist, 'it establishes the fact that there are only two conditions for perfect health —either all dirt or no dirt.' And yet the intelligence and morality among them are superior to those of any other peasantry in Europe, and out of those cabins will trip barefooted girls, so rosy-cheeked and neat, and sweet of voice, to sell you the little articles they knit, with a bit of bright color in their shawls to contrast with their dark hair, that they seem to have dropped from the clouds."

The REV. HEBER NEWTON, in a recent lecture on the mind-cure, gives the medical profession the following advice:

"The 'ism' (of Christian science) is one among the many signs of the inevitable reaction from the ultra-materialism of our age of physical science. It gives us the clue to the interpretation of the miracles of Christ in the higher naturalism which seems to us a supernaturalism. Such a man must have been a battery of electricity. Our medical faculty, if wise, will not attempt to sneer down a curative force which they have always theoretically admitted, but which they have practically neglected. Rather will they correct the defective methods of a too purely physical science by the supplementary methods of mental science. Let them absorb what is good in this heresy, and thus they will best refute it. Let them enter in their pharmacopœia the tonics of thought and feeling. Let them administer mental and moral stimulants scientifically, as those who really believe that an idea may be the most potent of drugs."

The craze for antiseptics, says The Medical Press, still continues, though in a modified form; physicians and surgeons are still found going round with soap-flakes of various medications, showing that certain fashions die slowly. Among the most recent of these protective soaps is one containing three per cent. of biniodide of mercury, the present fashionable antiseptic. Gentlemen who still believe that medicine may be followed as a mechanical occupation, in which the scrubbing-brush, with malodorous drugs, replaces brains and experience, will find much comfort in the knowledge that, as quickly as one panacea dies out or becomes disgraced, the ingenuity of the chemist produces another, and exclaims, in the words of HOOD'S pedler, "The last new patent, nothing comes nigh it."

The current number of the Medical Standard has the following reply to a complaint by DR. DESSAU, of New York, that it had not given him full credit for views expressed on the subject of infantile bronchitis: "The abstract was made from an editorial in the MEDICAL AGE, the use of the editorial 'we' in which led to the impression that the ideas credited to DR. MULHERON were of his own coinage." The editorial referred to appeared in our issue of April 25, 1887. We have carefully re-read it and fail to discover grounds for the implied charge of an attempt on our part to appropriate DR. DESSAU'S ideas. Wherever the editorial "we" is employed it is clearly in connection with a criticism or a direct endorsement of DR. DESSAU'S statements, and the Standard's attempt to shift the responsibility for its own stupidity is more artistic than fair, as DR. DESSAU may readily discover from a perusal of the editorial referred to.

A "reformer" hailing from Strickland, in this State, is endeavoring to inaugurate a crusade against male accoucheurs. He has given "this Odious Practice of having Male Doctors Present at the Confinement of Women, a good deal of study for a number of Years and has made a Point to get the private opinion of a large number of men." The men who do not condemn it, he says, "care very little about their own Honor, or the Honor of the Women they are connected with." He says also that "Doctors are sorely Tempted and excited (*sic*) by this Practice and I don't blame them as much as I blame the Women that upholds the Fraud." He avers, furthermore, that he never "lived in a Community but what Most of the Doctors were accused of Immorality." We shall watch the course of this unfortunate with interest. We should advise—but it seems like flying in the face of Providence to attempt to cure such cases.

The stories of the amount of work some men do in the way of medical practice are well nigh incredible. For instance an item is going the rounds to the effect that a New England physician had, besides attending to other work, made thirty-five visits and attended three confinements in twenty-four hours. The Sacramento Medical Times, however, beats this quite out of sight. It brings forward a doctor of its city who made one hundred visits, and attended four confinements in twenty-four hours, in addition to other business. Human nature, it seems, is pretty much the same in the occident and the orient. The above records are every-day occurrences here in Detroit. When we are in the humor some day, we will give an account of just what a Detroit doctor can do, when he lays himself out for it.

DR. HENNEAGE GIBBS, late of Westminister Hospital, London, has been imported to fill the Chair of Physiology in the Medical Department of the University of Michigan. According to some of the Eastern papers, he had a narrow escape from arrest for violation of the law preventing the importation of foreign laborers. He ran the gauntlet successfully, however, and is now snugly ensconced in his new berth, where he will, doubtless, soon grow to feel that he is no longer "English, you know." The assimilating influences of our American institutions (and fat salaries) are proverbial.

Psorinum is dried pus from the itch vesicle. A writer in the Southern Journal Homœopathy says: "Psorinum also cures religious melancholy, as do sulph. and nux. Psorinum has cured these two symptoms, which HAHNEMANN has classed among those peculiarly psoric, viz.: Every moral emotion causing trembling, and severe ailments from slight emotions. Psorinum suits best scrofulous and psoric constitutions, subject to grandular diseases. Psorinum cures obstinate constipation, and especially in children, as I have learned, when nothing else will."

A writer in a secular paper recommends the following as a boon to the brain-workers, invalids, and those of sensitive organization to whom noises are annoying: Tie a piece of spermaceti ointment of about the size of a pea, in a small square of linen and place it deep in the ear, working it around until it assumes the shape of the cavity. This forms an effective plug which shuts out noise and permits rest and quiet.

JOAQUIN MILLER wants to be cremated when he dies, and has, in anticipation of the event, prepared his own funeral pile on the top of a high hill. "When death comes," he says, "I shall be laid on that high heap of wood, in the blankets in which I die. The men who lay me there will light their cigars with the same hand that lights the wood-pile, and go down to breakfast. While I, phew! go up to God in clouds of smoke."

Sir Morrel Mackenzie is reported to have refused a fee of $30,000 to come over to this country and see a man in Michigan. We don't credit this report. In the first place because the sum would induce any man to make a trip across the ocean, and in the second place, because there is no Michigan man who would make any such difference between foreign and native talent. We have the money here in Michigan, but we have the good sense, too.

The following is New York law: No person duly authorized to practice physic or surgery

shall be allowed, or compelled, to disclose any information which he may have acquired in attending any patient in his professional character, and which information was necessary to enable him to prescribe for such a patient as a physician, or to do any act for him as a surgeon.

DR. J. J. MCALMONT, Professor of Materia Medica of the Arkansas University, Little Rock, Ark., states that he has had particularly gratifying results in the subcutaneous injection of normal liquid ergot, by applying a hot wet towel to the arm for 15 minutes, every three or four hours, for half a day after an injection. He has never had an abscess form after this procedure.

The "odor of sanctity" is likely soon to be a thing of the past in the East, through the introduction of sanitary reform measures. In the Holy Land sanitary reform is the order of the day. Bethlehem has her well-paved streets and even Jerusalem is becoming clean. The tanneries and slaughter houses have been removed without her walls, and a system of sewerage is being put into operation.

A school teacher said in reply to a health inspector's inquiry as to the location of the ventilators, that she did not have any and that she didn't see any use for them. "But how do you keep the air pure?" was asked her. "Oh, I've got a thermometer," was her reply.

PAGET laid down the following rule as a guide for applying passive movement to stiff joints: If the affected joint is at any one time of the day colder than the opposite (healthy) one, then you can use passive motion, and the more frequently the better.

The Eclectic Medical Journal speaks of "disease stranding the portly hulk of DR. STOW." It is only from the context that we learn that DR. STOW, who was a very estimable man, is dead. He was past 77 when his "hulk was stranded."

Book Notices.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN. By JOHN V. SHOEMAKER, A. M., M. D., Professor of Skin and Venereal Diseases in the Medico-Chirurgical College and Hospital of Philadelphia; Physician to the Philadelphia Hospital for Diseases of the Skin; Member of the American Medical Association; of the Pennsylvania and Minnesota State Medical Societies; of the American Academy of Medicine; of the British Medical Association; and a Fellow of the Medical Society of London. With colored plates and other illustrations.
New York: D. Appleton & Co.
Detroit: John MacFarlane.

The prodromata of this book have been manifest for some time—for several years, in fact. DR. SHOEMAKER has during this time been prominent in societies, both foreign and domestic, and in the periodical medical literature, in connection with diseases of the skin. Under such circumstances a book is invariably looked for, by the knowing ones. It is necessary, in order to the sale of a new book, that the author's name has been made familiar. If nothing more than this were necessary the book before us would sell like hot cakes, for who that reads medical journals or has attended the meetings of the American Medical Association for several years past, that has not been made aware of the existence of DR. JOHN V. SHOEMAKER, of Philadelphia?

Now, we do not wish to intimate for a moment that there is anything wrong in thus preparing the soil for the reception of a new book. It is, indeed, quite legitimate, and quite ethical withal. Were it not, a man must needs wait until his hair has grown grey in the service, before a publisher could be found to take hold of any book which he might write. The other plan makes it possible for young men to come to the front.

But let DR. SHOEMAKER'S book speak for itself. It is a large octavo volume of 633 pages, and it requires but a superficial examination of it to convince one of its adaptation to the needs of the general practitioner. In no division of medicine are the terms employed so technical (pedantical, in fact) as in dermatology, and the authors of works on the subject designed for others than those who make a specialty of it, have generally made the mistake of supposing them to be familiar with the peculiar nomenclature. DR. SHOEMAKER avoids this error, and substitutes for the language of the dermatologist, as largely as he is able, words and phrases more generally understood and in themselves not less descriptive. This feature of the book will at once commend it.

The book opens with a general consideration of the anatomy and physiology of the skin, and the symptomatology, diagnosis, pathology, etiology, treatment and prognosis of the diseases to which it is subject. This is a very excellent part of the book and its careful study will do much to remove from the subject of diseases of the skin the difficulties with which it is usually beset, in the mind of the general practitioner.

HEBRA'S classification, slightly modified, is that adopted by the author, and we have the diseases to which the skin is subject ranged under the following heads: 1. Disorders of Secretion and Excretion. 2. Hyperæmias. 3. Hæmorrhages. 4. Exudations. 5. Hypertrophies. 6. Atrophies. 7. Tumors. 8. Neuroses. 9. Parasites.

A marked feature of the book is the lithographic illustrations. These are taken from nature and are really excellent, presenting as

perfect a picture of the several ailments which they illustrate as seems possible. The practical nature of the treatise, from a therapeutical stand-point, is apparent throughout, and indeed, in no work on dermatology with which we are familiar is so much attention paid to treatment. The book is singularly rich in formulæ, for the value of which DR. SHOEMAKER vouches from his own experience. The book as a whole is an excellent one, and one which we have no hesitation in commending. The publishers, moreover, have done their part in a manner quite in keeping with the reputation which they have so long enjoyed.

THE RULES OF ASEPTIC AND ANTISEPTIC SURGERY. A Practical Treatise for the Use of Students and the General Practitioner. By ARPAD G. GERSTER, M.D., Professor of Surgery at the New York Polyclinic; Visiting Surgeon to the Mt. Sinai Hospital and the German Hospital, New York. Illustrated with two hundred and forty-eight Engravings and three Chromo-lithographic Plates.
New York: D. Appleton & Co.
Detroit: John Macfarlane.

It is a somewhat singular, and, perhaps, instructive fact that in spite of all that has been written of and claimed for asepsis and antisepsis during the past decade, there yet remain men, even among those engaged in reputable schools as teachers of the principles and practice of surgery, who not only renounce Listerism and all that it implies, but seek to emphasize their position by positive carelessness in the matter of cleanliness in performing even capital operations. They even instance the outcome of their practice as proof of the correctness of their position, depending, of course, on the confidence of those to whom they talk in their veracity. Doubtless there is middle ground between Listerism, pure and simple, and filth, in which the patient may take no harm. As between the two extremes, however, no one who is not a hidebound egotist will hesitate to concede that Listerism is much to be preferred. We take it that a modified Listerism is the practice of the great bulk of the intelligent and conscientious surgeons of the day.

The author of the book before us is an extreme Listerian, but at the same time recognizes the fact that "the aseptic and antiseptic methods present an incongruous chaos of seemingly contradictory and often incomprehensible detail, arbitrary and varying, according to the predilections or whims of this or that teacher." His aim is to remove from the method in which he so fixedly believes, those obstacles to its universal acceptance which have operated against it from the beginning. He maintains that "the surgeon's acts determine the fate of a fresh wound, and that its infection and suppuration are due to his technical faults of omission or commission."

It would, of course, be impossible within the limits of our space to analyze this book, or to indicate even its points of divergence from the practice of those who concede the correctness of the theory of asepsis and antisepsis. The author, by the way, indicates clearly the difference between these two terms, limiting the meaning of the latter to the destruction of septic processes which have already set in. It must suffice for us to declare that the book will take a high place even among the excellent treatises on the same subject already in the market. There is, however, a certain desultoriness in the arrangement and at times a certain awkwardness of expression (apparently inseparable from the German's English) which mars the symmetry of the book. But these are not sufficient to detract materially from the admiration which any one who has read it must have for the thoroughness with which the author treats his subject.

The work is one in which the physician will also take an interest, inasmuch as it discusses antisepsis in its medical as well as in its surgical bearings, although this part of the book is unsatisfactory because of its brevity.

The work of the publishers calls for especial mention. The paper, letter-press, cuts, binding and all, are of a very superior order—models, indeed, of the book-maker's art.

A PRACTICAL TREATISE ON THE MEDICAL AND SURGICAL USES OF ELECTRICITY. Including Localized and General Faradization; Localized and Central Faradization; Franklinization; Electrolysis and Galvano-Cautery. By George M. Beard, A. M., M. D., Fellow of the N. Y. Academy of Medicine, etc., and A. D. Rockwell, A. M., M. D., Professor of Electro-Therapeutics in the N. Y. Post-Graduate Medical School and Hospital; Fellow of the N. Y. Academy of Medicine; Member of the American Academy of Medicine; etc. Sixth Edition, Revised by A. D. Rockwell, M. D. With nearly 200 Illustrations.
New York: Wm. Wood & Co.
Detroit: John Macfarlane.

This book certainly requires no introduction to the medical profession of this country. It is known as the most comprehensive treatise extant on the subject of electricity and its therapeutic applications, and all who give special attention to this means of cure have long considered the book a *sine qua non*. The late DR. BEARD was a very original mind, and did probably more than any other writer to wrest the electrical treatment of disease from the hands of empirics. DR. ROCKWELL, who has had sole supervision of the work since DR. BEARD'S untimely death, keeps it fully abreast of the times. Within the past two or three years APOSTOLI, of Paris, has by his experiments and the results that he has succeeded in obtaining, greatly enlarged the domain of electricity in gynecology. The revision in the present edition, therefore, has been mainly restricted to this subject, and the chapter on the

Diseases of Women almost entirely recast. The methods through which these better results in gynecology are obtained, do but confirm the truth of the observation made in the preface to the third edition, to the effect that the real scientific basis for the use of electricity in medicine and surgery is found in electro-physics more than in electro-physiology.

THE INTESTINAL DISEASES OF INFANCY AND CHILDHOOD, Physiology, Hygiene, Pathology and Therapeutics. By A. Jacobi, M. D., President of the New York Academy of Medicine. Clinical Professor of Diseases of Children in the College of Physicians and Surgeons, New York, etc.
Detroit: Geo. S. Davis.

The astonishment that such an excellent assortment of books as go to make up The Physician's Leisure Library can be furnished at twenty-five cents a copy, is very much increased by an examination of the book before us. A volume of over 300 pages by a writer who has long held a position in the first rank among the authorities on pædiatrics, is in itself worth the price of the year's subscription ($2.50) to the Library. The explanation of this remarkable cheapness can be furnished only in the large size of the subscription list. DR. JACOBI treats his subject with exhaustive thoroughness, and the "practical" man, so-called, might take exception to the space which he devotes to matters purely physiological, in connection with foods and the functions of the child's digestive apparatus. The student, however, will not find fault with this, and the practitioner who masters it will be rewarded with abundant returns for his labor, in the success of his efforts in the direction of therapeutics. The practical part of the book leaves nothing to be desired.

DOCTOR AND PATIENT. By S. WEIR MITCHELL, M. D., LL. D. Harv., Member of the United States National Academy of Sciences; President of the College of Physicians of Philadelphia; Physician to the Orthopœdic Hospital and Infirmary for Nervous Diseases.
Philadelphia: J. B. Lippincott & Co.
Detroit: John MacFarlane.

The divisions of the book are into an Introductory, the Physician, Convalescence, Pain and its Consequences, the Moral Management of Sick or Invalid Children, Nervousness and its Influence on Character, and Out-door and Camp-life for Women. The familiarity of the profession with DR. MITCHELL'S literary style and his method of treating subjects of the nature of those discussed in this little work will ensure for this latest product of his pen a ready sale. The subjects are more closely connected with therapeutics than some might at first blush be prepared to concede, and certainly they are intimately associated with the requirements to the practitioner's success from other than a purely medical point of view. The book is one which it will pay the physician to have beside him to engage his leisure moments.

A MANUAL OF PHARMACY AND PHARMACEUTICAL CHEMISTRY. Designed especially for the use of the pharmaceutical student and for pharmacists in general. By CHARLES F. HEEBNER, Ph. G., Graduate in Pharmacy of the College of Pharmacy of the City of New York, Class of '81; Instructor in Theory and Practice of Pharmacy, at the College of Pharmacy of the City of New York.
Published by the author, No. 5 Gold street, New York. Price $2.00 and $2.50 (interleaved for student's notes).

This little work is especially designed for the use of students of pharmacy, and pharmacists in general. The author's experience as a teacher has qualified him for the preparation of such a guide as is best suited to their requirements. The feature of his book is its conciseness and its freedom from much matter which is incorporated into many treatises on the same subject, for no better apparent reason than to swell their size. It also contains much practical information not contained in larger and more pretentious works. It has received the warm endorsement of the pharmaceutical press, and in so far as the physician is qualified to do so, we commend it. In a future edition the author will, doubtless, see that a number of errors in proof-reading are corrected.

THE RECTUM AND ANUS: THEIR DISEASES AND TREATMENT. By CHARLES B. BALL, M. Ch., Univ. Dub., F.R.C.S.I.; Surgeon to Sir Patrick Dun's Hospital; University Examiner in Surgery; and Member of Surgical Court of Examiners, Royal College of Surgeons, Ireland. With 54 illustrations and four colored plates.
Philadelphia: Lea Brothers & Co.
Detroit: John Macfarlane.

This duodecimo volume of 410 pages contains a very full consideration of the diseases of the anus and their treatment. Especial attention is given to the treatment of wounds of the region discussed, and the recommendations are in harmony with the latest and most approved principles. This especial attention is the feature of the book, unless the singular conciseness and clearness of the author be so considered.

HEALTH LESSONS. A PRIMARY BOOK. By JEROME WALKER, M. D., Lecturer on Hygiene at the Long Island College Hospital, and on Physiology and Hygiene at the Brooklyn Central Grammar School, etc.
New York: D. Appleton & Co.
Detroit: John Macfarlane.

For the purpose for which this book is designed we should adjudge it good. It furnishes an excellent quality of "milk for babes."

Medical Progress.

On the Treatment of Dyspepsia.*—For practical purposes two great classes of dyspepsia might be recognized--one in which there was a deficient secretion of gastric juice, amounting sometimes almost to suppression, and another in which there was an excess of acid in the stomach, due either to hypersecretion or to fermentation of the food constituents —the consequent formation of lactic, butyric, and acetic acids. There was another and rarer form, in which the food was retained but a short time in the stomach, and was then passed through the pyloric orifice into the intestines, where it excited peristaltic action and gave rise to a copious evacuation immedi-ately following each meal.

The treatment of cases of dyspepsia due to deficient secretion was simplicity itself. Pharmacological investigation taught us that alkalies increased acid secretions. The gastric juice was acid, so that all that was necessary was to give an alkali before meals. It mattered little or nothing what alkali was given; it was simply a matter of convenience and custom. As a matter of fact, the favorite alkali in these cases was bicarbonate of sodium, and it was usually administered in conjunction with tincture of gentian or some other stimulating bitter tonic. The gentian and soda mixture was a great favorite, and was a stock remedy all over the world. Large practices had been built up on a knowledge of therapeutics not greater than would enable its possessor to write out this simple formula. As an accessory measure it was useful to give a few drops of dilute hydrochloric acid, with or without nux vomica, immediately after meals.

In the treatment of the second group of dyspepsias, characterized by an excessive formation of acid, an exactly opposite system of tactics must be pursued. Acids checked acid secretions. The patient was suffering from acidity—to use a popular phrase—so we gave acids before meals, the usual prescription being fifteen drops of dilute hydrochloric acid with tincture of nux vomica and gentian a quarter of an hour before dinner. Sometimes, however, this fails to check the formation of all the excess of acid, and then the best plan for the relief of the sufferer was to administer a compressed tabloid of bicarbonate of potassium or a dose of salvolatile. Occasionally we succeeded only in getting rid of the acidity, and failed to remove the flatulence. This, however, presented no difficulty, for an antiseptic would check the continuance of the fermentation and give almost immediate relief. It mattered very little what antiseptic was employed—carbolic acid or creasote would do well enough—but it was usually found more convenient to give one of the essential oils, such as oil of cajeput (in three-drop doses), or better still, pure terebene or the newly discovered pinol.

Arsenic was found to be wonderfully useful in those cases, already referred to, where the food passed too rapidly through the intestinal tract, and it was equally efficacious in gastritis simulating dyspepsia. A good indication for its administration was when the tongue was furred and covered with red and irritable papillæ. A drop of the liquor arsenicalis might be given every three hours, or one of the compressed tabloid triturates, containing $\frac{1}{100}$ grain of arsenious acid, before each meal. Opium (a drop of the tincture) or morphine ($\frac{1}{20}$ of a grain), in small doses, was equally useful, and nux vomica was the best remedy when the patient complained of pain and weight at the pit of the stomach, accompanied by acidity and heartburn. Ten drops of the tincture of nux vomica, in a tumbler of water, could be sipped slowly in the morning before breakfast whilst dressing, or a compressed tabloid, containing one minim, could be taken at intervals during the day, with an additional dose before and after meals.

Pepsin was of great value in the treatment of dyspepsia if certain points were attended to in prescribing it. It would not do simply to write down "pepsin"—pepsin by itself, unqualified, had no meaning—and it was essential to indicate distinctly what brand of pepsin was required. The French and German pepsins were a long way down in the list, and could not be compared for one moment with either the English or the American. It was difficult to institute a comparison between pepsin itself and the various fluid preparations of pepsin. Taking them weight for weight, the best pepsin was twenty-three times as active as the best liquid pepsin. It might be argued that the dose of the liquid preparation should be much greater than that of the solid, but that was only another way of saying that it was less active. Another point in the administration of pepsin was to give plenty of it, and to give it immediately after food. The ordinary dose was too small, and no hesitation need be felt in giving from fifteen to twenty grains. It was often said that pepsin yielded good results in the treatment of children, but failed with adults. The explanation was that children were usually given the ordinary adult dose. If grown-up people were treated with equal liberality there would be few complaints of its efficacy. Of late years a great deal had been written about *carica papaya* as a digestive agent, but, as a matter of fact, papaw juice could not compare in activity with the best pepsin, and papain and papayatin were not much better. The best papain examined had about half the activity of the best pepsin, as shown by experiments made both in acid and alkaline solutions. In many forms of dyspepsia—"starchy" dyspepsia especially—extract of malt was found to be the most powerful therapeutic agent. Here, again, much care was required in the selection of a thoroughly good and reliable specimen. The plan of predigesting milk and other articles of food with zymine answered admirably, and should always be resorted to in intractable cases.

There were certain accessory measures to which it was essential to pay attention in the treatment of dyspepsia, and special methods of treatment, such as washing out the stomach, might be found useful. The condition of the teeth was a matter of the greatest importance. Very often the patient had a good set of incisors, but nothing available for mastication. Stumps would have to be removed, teeth stopped and often a complete denture fitted before anything else could be done. The physi-

* Report of lecture by Wm. Murrell, M. D., F. R. C. P., published in Medical Register, February 18, '88.

cian and the dentist should coöperate and work hand-in-hand for the benefit of their patient. The custom of taking meals hurriedly and alone was a fertile source of dyspepsia. The sufferer, if a bachelor, should live in a family or join a club and dine there. A fair amount of work and exercise was essential for the patient's well-being, and he could not hope to digest properly unless he did something to earn an appetite For the busy man of sedentary habits, riding should be recommended as a good means of stimulating the action of the liver and affording exercise without causing too much fatigue. The meals should be taken in a bright, pleasant, well-lighted room, and too much attention could not be paid to the accessories of the table. The food should be abundant and varied in quality, whilst the post-prandial cup of coffee, with a cigar or cigarette, might rank as useful therapeutic agents. A fair amount of stimulant—taken only at meals—such as half a pint of sherry or a pint of good claret, often served as an aid to digestion. Some patients, however, derived more benefit from a little whisky and apollinaris than from wine. As a substitute for sugar, saccharine might be recommended.

HAMAMELIS VIRGINICA IN UTERINE HEMORRHAGE.—C. D. PALMER, M. D., in *Nashville Journal of Medicine and Surgery*, whose large experience as a practitioner, Professor of Gynecology and Obstetrics Medical College of Ohio, and Obstetrician to the Cincinnati Hospital, thus speaks of this remedy in a paper before the last meeting of the American Gynecological Society:

Hamamelis Virginica, as all know, is an American remedy, but its use is by no means limited to this country. Very contradictory reports concerning its virtues have been made, but so far as can be determined termined, the verdict is in its favor where it has been thoroughly tried, in a good preparation. Some of our best and recent works on therapeutics: WOOD and BARTHOLOW, do not refer to it, and it is merely mentioned by English authors, BRUNTON, WARING and RINGER. No reference is made to it by late gynecological authorities, THOMAS, EMMET, HART and BARBOUR, FRITSCH and GUSSERON, nor in the more recent contributions on menorrhagia in PEPPER'S system of practice, or our American system of gynecology.

The power of this drug as a hæmostatic entitles it to a higher position among our therapeutic remedies than it has occupied—a position it seems to me superior to the viburnum, hydrastis, or gossypium, and in some cases to ergot. An experience with this medicine, spread over a period of six to eight years, justifies me in expressing a high opinion of its virtues. It is true that it has been utilized for hemorrhages of all parts of the body, nose, air-passages, stomach, bowels, rectum and kidney, together for menorrhagia, extravasations under the skin, for varicose veins; but my experience is almost entirely confined to this condition of the uterus and the female bladder. Hamamelis does not seem to be equally potent for all kinds and conditions of uterine hemorrhage. For the sudden outburst of a flow, for active, profuse hemorrhage, it is inferior to ergot. But in slow, long-continued flux, where the blood is dark and venous, and the hemorrhage is passive in character—a symptomatology indicative of passive engorgement and relaxation, it is a remedy *par excellence*. These are conditions ever present in flabby, enlarged, subinvoluted uteri, after delivery and abortion, also in some form of chronic endo-metritis, before or following the removal of fungosities, and in chronic retroversion, some fibroids etc.

Menorrhagia may still continue in a mitigated form, a metrorrhagia return, even after the local disease of the uterus, exciting them has been improved as far as possible, by local medical and surgical treatment. I could give the history of a number of cases of uterine hæmorrhage resultant in fungosities and endometritis hyperplastia, which continued as a menorrhagia modified, but not controlled after repeated curettements, (in one case seven times), in which it was finally checked by the internal administration of hamamelis after failure with ergot.

I have also been much pleased with the effect of hamemelis in favorably influencing urinary hæmorrhage in several cases of papilloma of the bladder.

There are some worthless preparations of hamemelis; the so-called Pond's extract, and a colorless distilled product, are unworthy of confidence. The best preparation is the officinal fluid extract in doses of a few drops up to two drachms. Larger doses are needed when decided effects are urgent, although very small doses often repeated are recommended.

Hamamelis is somewhat tonic and sedative, slightly astringent, and decidedly hæmostatic. The virtues of the drug cannot reside alone in the tannic and gallic acids which it contains, for equal quantities of these astringents fail to produce similar results. Hamamelis has been extracted from it, but whether this represents the chief active ingredient is uncertain.

STOMACH-WASHING IN CHILDREN.—Washing out the stomachs of adults has, for a number of years, been practiced extensively, since Kussmaul first proposed it for the treatment of various gastric disturbances. In spite of the decided value of this mechanical treatment of the stomach, apparently but few practitioners have given it a fair trial. The reason for this may be looked for in the fact that it is a procedure requiring more energy on the part of patient than skill of the doctor, the swallowing of the tube, in the first attempts, being usually attended by retching and even vomiting, besides taking up considerable time.

The unpopularity of this therapeutic measure for adults, among practitioners, also explains why its application in the treatment of children is almost unknown, though Professor Epstein, of Prague, as early as 1880, had fully demonstrated its applicability and usefulness (Prag. Med. Wochensch., 1880, No. 45). In spite of repeated publications and reports on this subject, however, the great majority of physicians having charge of children's wards in hospitals and of clinics have either entirely overlooked them, or at once made up their minds that the infantile stomach-tube was the toy of a specialist desirous of the inventor's fame, and even considered its application a rather

dangerous measure. All of these authorities, however, never tried this method themselves on children. Not until lately did this question loom up again in the pediatrical literature of Germany, when a few adherents of stomach-washing published extensive reports (Epstein: "Jahrb. f. Kinderk.," Bd. 27, 1888; Lorey: Ibidem, Bd. 26; Ehring: Ibidem, Bd. 27; and Demme: "Jennersches Kinderhospitalbericht," 18, p. 89, Bern).

The method is the following: All clothing pressing upon thorax and abdomen of the baby are removed, the child is placed on the mother's lap in a half-reclining posture, and the head held forward. While gently pressing down the tongue with two fingers of the left hand, the operator slowly introduces a soft catheter (No. 8 to 10 of Jaques' patent, according to age). Irrigation is then proceeded with in the usual manner, always using small quantities of warm water, or boric solution (1 to 100) at first. The proceedure is repeated until the water returns perfectly clear.

The indications are said to be: 1. Mild forms of dyspepsia in very young children (two to six weeks old), retarding their growth and laying foundations for future serious troubles. In these cases a single irrigation is said to cure the trouble. 2. In acute gastro-intestinal catarrh of summer, and in the most violent forms of cholera infantum, this remedial procedure is stated to have saved many lives, particularly when applied early, stopping the most obstinate vomiting immediately, and cleaning the stomach so as to take away all remnant of decomposed food lodged between the folds of the mucous membrane, and any organic or chemical poison which may have been the cause of the attack from the outset. 3. In cases of obstinate intestinal catarrhal enteritis, the mechanical cleansing of the stomach (together, here, with enemata) will act like the washing out of an abscess, as the contents of this organ, especially in such cases, are often of fetid and decomposed character, remaining in there for days and infecting all food put into the stomach, and sending to the intestines colonies of infectious material, keeping up the disease of the bowels. One or two washings often cure the case.

In Epstein's clinic, five thousand children were treated by this method with unusually good results. As the rationality of this therapeutic measure is apparent, and as the only objection is the aversion of the children, and no accidents ever happened to any of the children operated upon, we think it advisable to give it a fair trial.—*Medical Record*, Feb. 25, 1888.

A New Treatment for Boils and Carbuncles.—The ordinary methods of treating boils and carbuncles by a "free, bold incision" often leads to good results, but the anticipation of this cutting is always such a terror to patients that surgeons would most gladly use a milder treatment, if certain that cure would follow. M. Verneuil, with an experience of half a century, has noticed with interest the different phases through which the treatment of these painful maladies has passed. Following in the footsteps of his teachers, he freely used the knife, to give it up only when the thermo-cautery came into use. Cauterization, with subsequent application of carbolated dressings, gave him such good results that his rule was to use the knife only exceptionally, in the gravest cases, and then to use it unsparingly. In 1883 he observed a case which made him reflect and change his mode of treatment. Since that time he has confined his treatment absolutely to the application of carbolated powders, and these for all kinds of boils and carbuncles, large, small, diabetic, painful or indolent, closed or open, and covered with gangrene. For the small and medium-sized carbuncles, this method of treatment has been very successful, without pain or extension of the inflammation.

In a communication to the French Academy of Medicine, at a recent meeting, he says: "This mode of treatment, so simple, has shown itself superior to all others in causing the sufferings, supportable but none the less disagreeable, to cease quickly, and in promptly limiting the trouble—a thing which cannot always be guaranteed in advance." After citing a number of facts to prove this statement, he concludes as follows:

"1. The furuncle and carbuncle are only degrees of the same infectious disease, and should have the same therapeutic treatment.

"2. This consists of surgical interference and topical applications. The former often seems indispensable, or at least only suitable for the majority of cases; the latter particularly efficacious in mild cases, but only playing a subordinate part in the treatment.

"3. The opposite should be accepted to-day. Cutting should become less and less necessary, and should be reserved for the exceptional cases. On the contrary, topical applications (prominent among which stand the carbolated and borated solutions) employed in a certain way, and particularly in the form of powder used repeatedly and for a long time, are of remarkable efficacy, and at the same time are absolutely harmless and easy of application.

"4. These applications of powder quickly abort, with very few exceptions, boils and carbuncles. They arrest the progress of the disease in the gravest cases, ordinarily cause the pains to quickly cease, reduce the fever, disinfect the purulent and gangrenous centres, hasten resolution, and promote the formation of healthy granulations.

"5. This treatment is suitable for all regions, and for all forms and periods of the disease; it is never harmful, and leads to a cure in a large number of cases. It assists surgical interference when that is necessary.

"6. Finally, it tends to prevent auto-inoculation and general infection."

In this report it is seen that the Frenchman is nothing if not enthusiastic. This treatment, however, is exceedingly simple, and bearing as it does the endorsement of such a man as M. Verneuil, should be carefully tried, even by the most incredulous.—*Med. Record.*

Respiratory Therapeutics.—For various reasons the study of respiratory therapeutics has received but little attention from American physicians. During the last few months several investigators have taken up the subject, but they have devoted their efforts almost exclu-

sively to the pneumatic cabinet and its limited application. While it is evident that we cannot command all the apparatus at the disposal of our continental colleagues, we believe that much can be done with simpler means. Quite recently (Zeitschrift für klin. Med., 13 Bd. 2, 3 and 4 Heft.), SCHREIBER has proposed some additions to the therapeutic armamentarium which we believe to be of real value, and think that by calling attention to them we can, perhaps, excite a trial of them by some of the investigators now endeavoring to solve the clinical problems involved.

These improvements consist in the use of a compressor and an elastic corset. The former is made of two plates, of a shape and size to fit the thorax in front and behind, connected by arms which allow of their mutual distance being increased or diminished, and the pressure they exert graduated in that way. The corset is much like an ordinary one, but fastened in front by a strong elastic band by means of which the pressure may be graduated circularly in any level of the thorax

The value of these instruments can be understood by considering the objections long urged against the use of local treatment in thoracic disease; objections shown by SCHREIBER in some new experiments to be well founded, but capable of more or less complete suspension by the use of his inventions.

It can be demonstrated that in the ordinary application of medicated vapors and compressed or rarefied air, the diseased parts of the lungs are less exposed than the sound parts, or uninfluenced by the therapeutic attempt. By the use of properly applied compression, however, SCHREIBER claims that the normal parts of the lung can be entirely set at rest, and that when this happens, the diseased part becomes at once capable of being acted upon by the medication or differentiation. As in all local treatment, thoroughness of application is of the utmost importance, and the longest possible contact of the remedy with the diseased site must be attained. Not less important is the proper selection of the remedy to be applied, and in estimating the results it must be remembered that no more should be expected of local treatment in the hands of the physician than is warranted by the common experience of surgery. SCHREIBER claims that in cases of atelectasis and insufficient expansion of the lungs following pleural exudates, severe acute pneumonia, adhesions, and pneumothorax, the value of the compressor can be easily demonstrated.

In catarrh, or ulceration, abscess, gangrene, and tuberculosis, less is to be looked for, and disappointment not so much to be feared from the mechanical as from the pharmacological factors in the method. SCHREIBER'S arguments in favor of circular compression in chronic emphysema and the secondary atelectasis following long-continued coughing in that disease, are plausible, and, according to him, the new method seems more likely than the older ones to remove the anatomical basis of the emphysema.

It is evident that *post hoc* arguments of single observers cannot lead to a definite advance in respiratory therapeutics. Experiments on animals are excluded by the differences in the form of the animal and human thorax. With the pneumatic cabinet and any ordinary atomizer, and such compressors and corsets as are mentioned above, it would be easy to ascertain the value of the improved therapy, and, premising a proper adaptation of medication and method to individual cases, we believe it fruitful of good results.—*Med. News*, Feb. 25, 1888.

THE MODERN TREATMENT OF URETHRAL STRICTURE.—Legitimate criticism on the evils of specialism applies only to the practice, not to the scientific work done in special fields. An illustration of what has been accomplished in genito-urinary surgery by the diligent ingenuity of its followers, is furnished in a recent article by DR. F. S. WATSON (Boston Medical and Surgical Journal, 1887, No. 26), entitled "A Comparison of Gradual Dilatation, Divulsion, Internal and External Urethrotomy, in the Treatment of Urethral Stricture." This article, taken in connection with the discussion which followed it before the Suffolk District Medical Society, shows that the general methods of practice in the treatment of strictures have become quite uniform, and that the labors of the specialist have developed the art of treating strictures so that the general practitioner can carry it out in most cases, when he has acquired a little technical skill.

The three accepted methods of treating organic urethral strictures are by gradual (or rapid) dilatation, divulsion, and urethrotomy.

Gradual dilatation is admitted to be the least efficacious, and is rarely resorted to except as a temporary or palliative measure, especially in strictures of the anterior urethra. In the deep urethral strictures, owing to its comparative safety and to the disinclination of many patients to an operation, it is oftener employed. But no surgeon promises a cure from its use. The method, according to DR. WATSON, is responsible for more bad urethras (false passages) than anything else, for the steel sound has a powerful leverage and the chronically inflamed mucous membrane is easily torn. We think, however, that harm only occurs because the clumsiness and carelessness of many patients, and perhaps a few physicians, are almost beyond belief.

Divulsion is an operation of which the mortality, according to statistics collected by WATSON, is from one to five per cent. This represents the operation as much more dangerous that it really is to persons with sound kidneys and bladders. Except sometimes in early strictures, divulsion is believed never to be curative. Still, the best results have not been gotten from it by many, because the operation has not been followed by thorough dilatation. The theoretical objection that the tear made by divulsion is worse than the clean cut of the urethrotome, does not always hold good, as was shown in the discussion later by DR. CABOT.

Internal urethrotomy is acknowledged to be, on the whole, the best and surest way of treating organic strictures not in the deep urethra. In a small percentage of cases, permanent cure is obtained. The danger is about the same as in divulsion. For strictures of the deep urethra external urethrotomy is very generally believed to be the best, and even the safest method, although gradual dilatation and divulsion are sometimes indicated.

DR. WATSON states his conclusions as follows:

1. All strictures anterior to five inches are best treated by internal urethrotomy. DR. OTIS' operation yields the most enduring results.

2. Divulsion should be rejected as an operation for stricture, unless it can be shown satisfactorily that where carried sufficiently far, it yields as permanent results in as many cases as internal urethrotomy.

3. Dilatation, where practicable, should be employed in strictures deeper than five inches.

4. For strictures deeper than five inches not suitable for dilatation, external urethrotomy should be selected, and not reserved for an emergency operation only."—*Medical Record*, Jan. 28, 1888.

TREATMENT OF INSOMNIA.—The wise physician has recourse to medicine only when Nature is too languid to respond to the mere allurements of Life. This is especially true in the case of that troublesome condition known as insomnia—the outcome of nervous disease and the frequent precursor of insanity. In its aggravated form, insomnia is a grave malady, calling often for heroic treatment. But this aggravation, where it is not a primary result of advanced disease, may be established by the habitual dependence upon hypnotics. We have lately spoken of this danger, and deprecated the use of opium, chloral, cocaine, etc., etc., for trivial causes. There are a great many cases of insomnia in which simple, direct physiological treatment will accomplish the desired end. A brisk walk, followed by a cold douche on the head before retiring, will often check incipient insomnia. On the other hand, a hot shower bath may be equally effectual. Warmth, generally speaking, favors sleep; but excessive warmth has the contrary effect. On this account, while it is advisable never to go to bed with cold feet, it is equally so to avoid excessive covering. The bed should be neither too warm nor too soft; the covering barely sufficient. A cool head is as necessary as warm feet. Try a cold compress on the head, protecting the pillow with a dry cloth, and applying the compress back to the neck. The ordinary sanitary conditions must be present in a bed-chamber in order to banish sleeplessness. Excitable persons should keep quiet during the evenings, which with all persons should be, as far as possible, a time for relaxation, and especially change. Persons of sedentary habits are better for doing some muscular work, and *vice versa*. Regular hours and sufficient exercise are necessary; also a good digestion. Gastric disturbances induce insomnia. Late eating does not interfere with sleep, provided the food taken be easily digestible, in which case it rather favors sleep. This is especially true with invalids.

Among the devices found to control insomnia we may mention the water-drip. The sound of water dropping slowly and steadily into a pan occupies and quiets the brain. This is the principle on which we are told to count sheep going over a fence, and do any sort of automatic thinking, if such an expression be permissible. A former victim of insomnia cured himself by keeping the eyeballs looking down. Another kept rolling them in one direction with good effect, repeating, meanwhile, a certain word or number. Long inspirations by the mouth and expirations by the nostrils, conceiving the air as currents, has been found effectual. All intellectual exercise should be stopped half an hour before bedtime. A tumbler of milk, instead of the usual copious draughts of water, taken during sleeplessness, will often help to overcome it.—*Med. Register.*

THE TREATMENT OF WARTS BY INTERNAL ADMINISTRATION OF ARSENIC.—During the last two years many cases of warts on the hands of young children have come under my notice, for treatment; and the following will, I think, fully show the efficacy and supreme advantage of arsenic, given internally, over the local application of the powerful caustics:

C. P., æt. 17, a young lady, consulted me in consequence of having suddenly developed innumerable warts on her hands, and which she said had grown with great rapidity, some of the largest of which had attained their growth within a week or ten days; the whole skin of the hands seemed to be filled with small growths, some not visible, but easily distinguishable to touch. To attack all with nitric acid would have been utterly impossible. I therefore applied the acid to about half a dozen of the largest, and put her on a mixture containing liq. arsenicalis ♏ iij twice a day; at the end of a week she came to me in a state of great delight, for after having taken but two bottles of the mixture not a vestige of a wart was to be seen or felt, except the scars left by the application of the acid to the few I treated in this way.

John F., æt. 8, was brought to me in consequence of his having several large warts on his hands, and which repeatedly bled. I decided at once to treat him by arsenic internally, and not apply anything externally. He took liq. arsenicalis, ♏ ij, twice a day; at the end of a week all the warts assumed a dull leaden color. I repeated the medicine, and ordered him to see me again in a week's time; at the end of which, on seeing him, all the warts had disappeared but one, which I easily removed with my finger.

Minnie P., æt. 4, I happened to see while attending her mother in a confinement, and was struck by the peculiar appearance of one of her little fingers, the ungual phalanx of which was apparently the seat of some abnormal growth, being irregular and bulbous; on closer examination, however, it proved to be nothing more than a crop of warts, which almost entirely covered the nail. On the same hand there were many others, and likewise on the opposite hand. After taking liq. arsenicalis, ♏ j, for ten days, most of the warts had fallen off, and those which still remained I easily removed with my finger and without the slightest pain to the child. Several other cases, in which I have treated these unsightly and troublesome growths in the same way, I could record, but in every instance the cure has been complete and rapid; and I think the above cases in themselves alone prove the value of arsenic for treating warts; for it is certainly equally rapid in action, and moreover has the great advantage over the caustics in being painless, which is of so much importance in treating young children.

—B. G. PULLIN, in *Bristol Med. Chir. Journal*, Dec., 1887.

THE TREATMENT OF HEADACHES BY NITRO-GLYCERINE.—DR. TRUSEVICH publishes in the *Ejenedlynaya Klinischeskya Gazeta* a series of observations on the effect of nitro-glycerine on headaches. He adopts, in the main, the classification of headaches made by DR. DAY, whose work he translated into Russian, in which language it has already gone through two editions. The preparation generally used was the 1 per cent. alcoholic solution, though in a very obstinate case the 10 per cent. solution was used, two drops being first given, and after an interval of two minutes, three more. The result of this heroic medication was that the patient, a girl of fifteen, became pallid, and her pulse very weak; however, a little water and some smelling salts quickly revived her, and she was none the worse. The nitro-glycerine had no effect on the headache, which was of a persistent character, and was probably due to some organic lesion, perhaps an affection of the cranial bones. As a rule, two or three one-drop or two-drop doses of the 1 per cent. solution placed on the tongue at intervals of a very few minutes sufficed to arrest the headache. The conclusion arrived at was, that all cases which depend entirely, or almost entirely, on a vaso-constrictor neurosis are immediately curable by nitro-glycerine. In cases where the cerebral anæmia is partly due to deficiency or poorness of blood, milk, iron, arsenic, quinine, and other tonic remedies are, of course, required in addition to the nitro-glycerine. The chief indications for the successful treatment of migraine by nitro-glycerine are pallor of the face and a paroxysmal character of the pains, also their augmentation on pressure of the carotids, and their diminution when the head is lowered. In "nervo-hyperæmic headaches" nitro-glycerine is useful, but it only acts indirectly by dilating the vessels in other parts of the system, and thus relieving the congestion in the cerebral vessels. It is positively injurious in headaches depending on passive hyperæmia. On this subject, however, DR. TRUSEVICH promises a future article. As a rule, he thinks that if nitro-glycerine fails to relieve, the prognosis is probably bad, as the pain is generally due to some organic lesion, such as thickening of the fibrous coverings following chronic alcoholism or syphilis, or to some osteophyte caused by periostitis, or, lastly, to morbid changes in the cranial bones. In some headaches of rheumatic origin, nitro-glycerine appears to have some effect, but DR. TRUSEVICH thinks that in others massage would probably be more beneficial. Where headaches are due to heart, lung, or to hepatic disease which causes passive congestion in the cerebral vessels, nitro-glycerine cannot be expected to do much good.—*Lancet.*

ERGOT AND ACETIC ACID IN POST-PARTUM HÆMORRHAGE.— It must have occurred to everyone with a few years' experience in practical midwifery to have encountered cases of *inertia uteri* after delivery. The labor may have been normally rapid and strong, and the placenta and membranes discharged entire after the usual interval, leaving a firmly contracted uterus; but presently, notwithstanding the continued pressure of the hand, the uterus elongates and acquires a feather-bed feel, and, refusing again to contract, hæmorrhage results; or the uterus may have been inert from the first, barely effecting delivery, or requiring instrumental interference; and all this notwithstanding the administration of large doses of ergot. In cases where the uterus does contract firmly at first, I take it to be but a continuation of the routine of labor, and the uterus, finding no opposition and nothing to expel, relaxes instead of passing into a state of tonic contraction. I should like to insist on the value of a pasty or of a hectic complexion as a warning, and that an accelerated pulse, be it strong or weak, is an almost certain forerunner of hæmorrhage.

The liquid extract of ergot is very unreliable in these cases, and I have been greviously disappointed with preparations of ergot and ammonia in several instances. I have been equally pleased at the quick action of vinegar, given after ergot has failed, especially when followed by brandy or ether. Having experimentally given a wineglassful of vinegar several times, without ergot, I have found little benefit result. Arguing by analogy, I made the following mixture: ℞ Liq. ergotæ, acid. acetic. concent. ää ℥ j; æther. sulph. (s. g. .735) ʒ iv. This should be put into a three-ounce bottle, well corked, and shaken thoroughly. I administer of this mixture three teaspoonfuls in a wineglassful of water, and having used it now for a considerable time I am delighted with its efficacy in causing contraction and giving a refreshing sleep after a short interval, with little or no complaint of after-pains. I combine this with the good old-fashioned percussion pad wrapped round with a napkin. I look upon the ordinary binder, with or without the two or three napkins usually offered by the nurse when a pad is asked for, as a delusion and a snare. With the lower edge well below the hips (where it ought to be to prevent slipping up), the direct pressure on the uterus is almost *nil*, and it serves merely to hinder the pressure of the hand in manipulating the uterus.—JOHN A. FRANCIS, in the *Brit. Med. Journ.*

TREATMENT OF EARACHE IN CHILDREN.—DR. W. D. BABCOCK, in So. Cal. Pract., says: If we can see the case at or near the beginning, one or two leeches applied near the external meatus will, in many cases, relieve the pain and make all the symptoms lighter. The leeches should be applied at different places, depending upon the seat of pain. According to WILDE and v. TROLTSCH, however, local bleeding can exert an influence upon the blood supply of the tympanic only when the operation is performed in the anterior region of the ear, close in front of the tragus, because the veins which perforate the membrana tympani extend in the lining membrane of the external meatus, along its anterior superior wall, and discharge in front of the tragus into the anterior facial vein.

The leeches can be applied to the mastoid when there is pain there on pressure, as it can be assumed in such a case that the inflammation has involved the mastoid cells. This occurs, however, most often in acute attacks in chronic cases. This, with repeated instillations of hot water, will relieve most cases. Warm

and moist applications are to be made around the ear, not over it. Inflation of the eustachian tube is always indicated if the pain has continued for more than a day, because, as BURNETT says, most of the cases begin as tubal catarrh. In children this is easily done with a simple rubber tube, inserting one end in a nostril, and, when the child is crying or struggling, blow pretty strongly into it. In most cases you can know the tube is open, by seeing the child raise its hand to its ear. But in most every case the post-nasal space and the nostrils demand careful attention. By keeping these clean and free from mucous the breathing and swallowing will be easier, and during these movement the eustachian tube will be more apt to open and close, and this muscular action will help to empty it of any exudate that may be in it. This cleaning can be easily done, now that we have a splendid helper in cocaine. By applying a weak solution of cocaine to the nostrils, either by a spray or feather, we contract the mucous membrane, open the nostrils, thus allowing the collected mucous to come away more easily. After the cocaine is used, an application of an alkaline solution will remove the remaining mucus. To prevent too great reaction after cocaine, vaseline is the best thing I know of. A feather to apply all of these will do the work as well as the most expensive instruments. The vapor of chloroform blown in the ear will oftentimes give relief. A pipe can be used for this. With the external use of opium and atropine I have had no success. Internally morphia or chloral hydrate, in proper doses, are to be given if pain is severe.

NEW REMEDY FOR CYSTITIS.—(California Med. Jour.).—Having seen nothing concerning the new remedy for cystitis and hyperesthesia of the genito-urinary tract, Pichi (Fabiana imbricata), and being very much pleased with it, I will report, briefly, its action in a few cases. The first case was one of cancer of the uterus, where the whole anterior part of the vagina was indurated and contracted—the patient having to urinate every half hour all night, and the pain would start the tears every time. I gave the following prescription: ℞. Extract pichi, five drachms; liquor potass., one-half drachm; elixir aromat., q. s. ad three ounces. A teaspoonful every three hours. In less than two days—in fact, the first night—she had to get up but once. She took the medicine irregularly, as required, until she returned home, which was three weeks after, and it controlled the painful urination completely. Neither did she have the backache, which has been a constant accompaniment heretofore.

Case 2.—A lady, with painful and frequent urination, having to get up four times a night. She had been over-treated by one of the too numerous class who see a cause for every ill that woman is heir to through a vaginal speculum. In this case the remedy acted promptly, remedying the backache as well.

Case 3.—A man with a *mild* gonorrhœa. Stopped all scalding of the urine at once.

Case 4.—An old lady, aged 83, who said it appeared very strange none of the doctors could do her any good. She had to get up several times at night to urinate. She was all right in twenty-four hours, and has continued so since.

I have tried local applications in two cases of vaginitis, and they were greatly benefitted, and ceased using it. Am now anxiously watching for an old man, with prostatitis and cystitis, to come along.

I believe P., D. & Co. alone handle this drug now.

Have considerably lessened the first named dose; now give ten drops once in three hours.—*Peoria Medical Monthly.*

THE HYPNOTIC ACTION OF BOLDIN.—It has been known for some time that the glucoside which is contained in boldo-leaves, and which is called boldin, has hypnotic properties.

Recently French physicians have been experimenting largely with the drug. Their results have been summarily stated by DR. JURANVILLE in an extensive work on the subject.

According to DR. JURANVILLE, in Le Progrès, boldo, or the glucoside boldin, is superior to any other hypnotic or narcotic (such as chloral, opium, etc.). It is easily taken, and is unaccompanied by any disagreeable symptoms. Indeed, the author asserts that its use increases the appetite and greatly strengthens the patient. Dose of five to ten grammes (77 to 154 grains), have been given daily without causing any evil results. The sleep produced by the drug is similar to natural sleep in every respect; in this respect the drug is superior to all other hypnotics. The respiration becomes regular and quiet. Excited patients, suffering from hysteria and other nervous complaints, who for a long time have been unable to sleep, sank into a most refreshing and tranquil sleep, under the influence of boldin.

The amount of glucoside contained in boldo-leaves is about three per cent.

The drug may be given in capsules, in doses of .2 gramme ($3\frac{1}{10}$ grains), or, as an injection, as 100 grammes of water ($3\frac{1}{4}$ ounces), and 5 grammes (77 grains) of boldin.—*Boston Med. and Surg. Journ.*, Feb. 9, 1888.

SIZYGIUM IN DIABETES MELLITUS.—In the Hahnemannian Monthly, for December, 1887, DR. A. B. KINNE, of Syracuse, N. Y., reports a case of diabetes cured by this remedy. It is as follows:

During the summer of 1885, MR. G——, aged 65, consulted me, complaining of great thirst, dry skin, gnawing pain in stomach, dry, red tongue, frequent urination of large quantities. On examination, I found urine containing one and a half per cent. of sugar. I put him on a strict diabetic diet and gave Uranium nit., which gradually caused disappearance of sugar and all other symptoms. I instructed my patient to adhere to the strict diet, which he did until the spring of 1886. In June, 1886, he again consulted me, with same symptoms, but with two per cent. of sugar in urine. The strict diet was resumed and Uranium nit. prescribed with no benefit, the amount of sugar steadily increasing. I also gave helonias and phosphoric acid with no benefit, until in September the urine contained eight per cent. of sugar with a specific gravity of 1.040 and amounted daily to three quarts. I then gave Sizygium 1x, five drops four times daily. The amount of sugar gradually decreased, and in six weeks none could be found; the quantity of urine

normal and specific gravity 1.020. I have examined the urine every month since and found it in normal condition in every respect up to the present time, nearly eight months. Patient still adheres to the strict diet and is feeling well and strong.—*Medical Advance.*

THE TREATMENT OF ACNE.—UNNA, in the Monatshefte für praktische Dermatologie, No. 1, 1888, advises the use of the following formulæ, to be applied at night:

℞ Ung. zinc. benzoat., 86 parts.
Sulphur. præcip., 10 parts.
Terræ siliceæ, 4 parts.

Or

℞ Ung. zinc. benzoat., 80 parts.
Resorcin. puriss., 10 parts.
Ferræ siliceæ, 10 parts.

For use during the day either of the following lotions may be employed:

℞ Resorcin., 2 to 5 parts.
Glycerin., 1 part.
Aq. flor. aurant., 20 parts.
Spiritus, 80 parts.

Or

℞ Hydrarg. bichlor. corros., $\frac{1}{20}$ to $\frac{1}{5}$ part.
Glycerin., 1 part.
Aq. flor. aurant., 20 parts.
Spiritus, 80 parts.

COLLINSONIA CANADENSIS, FLUID EXTRACT, AS A SEDATIVE AND ANTISPASMODIC.—Collinsonia canadensis is one of the many medicinal plants, indigenous in America, which have been prominently brought before the medical profession by the enterprising firm of Messrs. Parke, Davis & Co. The fluid extract is an elegant pharmaceutical product, and, like all the preparations made by that firm, may be thoroughly relied upon as containing the active principles of the drug. The dose varies from 15 minims to about a fluidrachm of the fluid extract. It has not been much used in this country yet, but an interesting paper on the therapeutic uses of Collinsonia, by DR. SHOEMAKER, of Philadelphia, appeared in the British Medical Journal of October 1, 1887. He strongly recommends it as a sedative and antispasmodic in urinary troubles, and has seen remarkable benefit from its use in acute cystitis. He states that: "Incontinence of the urine in children, due to spasmodic contraction of the bladder, can be permanently relieved by its administration." He has found it useful in leucorrhœa, prostatorrhœa, spasms of the sphincter ani, dysmenorrhœa, and many other affections.—*Liverpool Med. Chir.*, Jan., 1888.

TREATMENT OF DOG BITES. — DR. D. M WILLIAMS, of Liverpool, writes: "Among some people the wounds caused by the bite of a dog are washed with hot water, and salt is then rubbed into the wound; such a case occurred in my practice recently. Others wash the wounds with hot vinegar only. Either plan is better than the barbarous custom of applying nitrate of silver.

"The principal object in view should be to thoroughly disinfect the wound, and any disinfectant which would do this and cause free bleeding (thus helping to wash out the poison) would answer the purpose. I prefer sulphurous acid, which does all this, and the wounds heal well after; but any well-known substance, such as solution of chloride of lime or zinc, might answer the purpose, if the absurd practice of cauterizing the wound with nitrate of silver were discontinued.—*Brit. Med. Journ.*

A SUCCESSFUL TREATMENT OF HYDROPHOBIA.—DR. KICHENSKY, in an elaborate study, from the clinical side, of 693 cases occurring in the hospital at Moscow, reports a case in which success followed a peculiar treatment (quoted in the Bull. Gén. de Thérapeutique, January 15, 1888).

A woman, aged thirty-five, was bitten by a mad dog, five weeks before her admission to the hospital. She presented all the usual symptoms of the disease in their most typical form. She was placed in a warm bath, where she was bled to syncope, losing fourteen ounces. During the two following days she was given ten grammes (160 grains) of powdered belladonna leaves. On the third day the hydrophobia disappeared.—*Amer. Jour. Med. Sciences*, March, 1888.

MEDICAL TREATMENT OF VAGINISMUS (DR. GIRARD):

1. Bromide of potassium in 2-gramme doses daily.
2. Sulphate of quinine, because of a certain accession of intermittent fever.
3. Friction on the dorso-lumbar region with a liniment composed of 60 grammes of the oil of hyoscyamus and 15 grammes of chloroform.

The author adds that when the vaginismus is accompanied by a fissure in the vulva, he adds to the foregoing treatment the use of suppositories of krameria made after the following formula:

℞ Cocoa butter, 3 gr.
Extract of krameria, 2 gr.

LACTIC ACID IN DIARRHŒA. — M. HAYEM writes again in the Bulletins et Mémoires de la Société des Hôpitaux de Paris, on the value of lactic acid in diarrhœa, especially when the stools are green, from a chromogenic bacillus, and acid in reaction. He now recommends larger doses; 20 teaspoonfuls of a two-per-cent. solution may be given in the 24 hours. The solution is prepared from 80 grammes of water, 20 of sugar, and two of pure lactic acid. In certain forms of chronic diarrhœa in the adult he has also found the medicament of value, if given in doses of two or three dessertspoonfuls half an hour or an hour after meals. CANTANI has given as much as four grammes of lactic acid a day in diabetes.

BRYONIA DIOICA IN UTERINE HÆMORRHAGE. — PROFESSOR PETRESCU, of Bucharest ("Progr. méd.," Dec. 24, 1887), recommends a wine of *Bryonia dioica* as far superior to ergotine in the treatment of metrorrhagia. Three hundred grains of the root are macerated for eight days in a quart of white wine. Dose, a tablespoonful every hour until the hæmorrhage stops.

The Medical Age.

Vol. VI. DETROIT, MARCH 26, 1888. No. 6.

Original Articles.

ALCOHOL IN HEALTH AND DISEASE.

BY HENRY E. LOCHER, M. D., GRAND RAPIDS, MICHIGAN.

Mr. President and Gentlemen of the Academy: The subject that I will present for your consideration this evening, is one we hear discussed in all medical journals, the ministry use it as the target against which they hurl their most powerful invectives, teachers and leaders of social ethics discuss it in their learned ways, and the general public is, with very little exception, more or less interested in it.

You will therefore excuse me if I review a few thoughts on the physiological and therapeutic uses of alcoholic stimulants. The prevalence of the appetite impelling man to drink intoxicants has been remarked by all writers who have considered the alcohol question from a scientific standpoint. It has been argued from this natural tendency, which has been, and is a characteristic of all nations, in all ages, that the instinct which prompts man to indulge in alcoholic stimulants cannot be wholly wrong, and in support of this position the appeal has been made that other passions existing as integral parts of human nature, no one ever claims to be abnormal. It is the improper or excessive gratification of them which is fraught with ruin and disaster. We may speculate in whatever way we will, and moralize with all the power of an EMERSON or a SPENCER, yet, notwithstanding, the fact still remains that this instinctive tendency is constantly in operation. We will find much truth in the words of a famous poet who says:

"Man's great passions are coeval,
With the vital breath he draws—
Older than all codes or customs,
All religions and all laws.
Before prudence was, or justice,
They were proved and justified.
We may shame them and deny
Them, yet their dominion will abide."

The only kind of alcoholic liquors known to the ancients, were those obtained from the natural process of fermentation. The fermented juice of the grape was the oldest, though we read of intoxicating drink being made from milk, rice, malt, millet seed, apples, pears, etc., among various nations. The art of distilling is of modern discovery, originating in China where it was applied to the obtaining of alcohol from fermented rice. MARCUS GRÆCUS, in the 13th century, first described the distillation of alcohol from strong wines. During the course of the following century the art of distilling alcohol from infusions of the cereals came into vogue. In 1595, by an act of the English Parliament, the production of alcohol from wheat and barley was prohibited under very heavy penalties. At a somewhat later date means were discovered from distilling it from the juice of the sugar-cane, rice, molasses, cocoanut, and other vegetable productions, thereby evading the heavy penalties of the law. With the chemistry of alcohol I presume you are all familiar, so I will only review a few of the methods for obtaining it.

Alcohol is a product of vinous fermentation, which is the decomposition of sugar into carbonic acid and alcohol, and is obtained in a diluted state from any liquid in which this fermentation has taken place. In France it is extracted from wine and is called brandy or burnt wine; the Germans call it branden wein. From fermented infusions of wheat, corn, rye, barley or potatoes, whisky is obtained which, when rectified with turpentine, is called gin; and when rectified with juniper it is called Holland gin. Rum is the product of the distillation of molasses; and thus, throughout the entire list, each being named differently, according to the special source from which it is obtained. The effect of alcohol is modified by the other ingredients which are contained in the various compounds. Thus wine, besides water and alcohol, contains carbonic, acetic, tannic, tartaric and malic acids, besides cream of tartar, chloride of potassium and of sodium, coloring matter, grape sugar and œnanthic ether. Ale and porter contain alcohol in proportion of from four to six per cent., besides water, sugar, gum, extractive and bitter matter, fatty and glutinous matters, lactic and carbonic acids, and salts. There can be no doubt that the salts, acids, ethereal elements and sugar which the fermented liquors contain do moderate the stimulating action of the alcohol, and ensure a more rapid discharge from the system than would otherwise take place. An important distinction, based on the percentage of alcohol, should be made between the fer-

mented and distilled liquors, the former being a natural product and containing little alcohol, the latter being an artificial product with a high percentage of alcohol.

In dealing with the physiological aspect of the subject, we will find that it resolves itself into the consideration of several questions, namely, is alcohol a food, a medicine or a poison? All are agreed that alcohol in excess is a poison; that is to say, when introduced into the system in too large proportion or quantity, or when taken in a too concentrated form. Taken in its purity, in sufficient quantity, it at once destroys life. Scarcely is there any substance more noxious. It arrests those chemical changes upon which life depends. It coagulates albumen and corrugates the tissues by abstracting from them their water. Applied in the form of proof spirits to the exposed brains of animals, it produces paralysis; applied to the heart it stops its pulsations. Fish soon loose their activity in water containing a very small proportion of alcohol.

Among the morbid conditions resulting from the habitual use of too much alcohol we have inflammations of the stomach, liver, kidneys, brain, etc., with indurations, thickening and other degenerations of these organs. The phenomena of intoxication are owing to the paralyzing action of alcohol on the nervous system. Before this point is reached, however, the nervous and circulatory systems become excited, the mental faculties are more active, the heart beats fuller and more rapidly, the face becomes more flushed and the senses are rendered more acute in their perception. If now the further ingestion be stopped the organism soon returns to its former condition without any feeling of depression being experienced; but if the potations are contained the complete command of the faculties is lost and a condition of temporary insanity produced. If further quantities are imbibed a state of prostration follows, marked by coma and complete abolition of the power of sensation and motion. Such is a brief outline of the obvious symptoms which ensue upon the use of alcoholic liquors in considerable quantities. When taken in amounts less than sufficient to induce any marked effects upon the circulatory and nervous systems, there is, nevertheless, an influence which is felt by the individual and which is mildly excitatory of the moral and intellectual faculties. WILLSON and LETTSON, more than half a century ago, described in vivid colors the symptoms and pathology of drunkenness, and modern observers can add but little to the faithfulness of the representation. He that will represent only the dark side of the picture can never be anything but a "teetotaler."

What shall be said of the moderate use of intoxicating liquors? Is it safe to use alcohol at all, and are there conditions and circumstances in which alcohol is good as food or medicine, or both? Here an appeal must be made to the historical data and experimental investigations requisite for a proper solution of the question. Experimental enquiries as to the role of alcohol in the human system date from the investigations of DR. PERCY, in 1829. His experiments were made chiefly on dogs. They have often been brought forward as proving something in regard to alcohol which was not true of any other substance. This observer injected strong alcohol into the stomachs of dogs. The quantities varied from two to six ounces. Death usually followed, and upon examining the blood and brains for alcohol it was always found. The presence of alcohol in the blood and brain, to those acquainted with the principles of assimilation and absorption, has rather a horrible aspect. But when we know that there is NO substance capable of being absorbed by the stomach and intestines which cannot also by proper means be detected in the blood and viscera, the subject loses much of its striking character. DR. PERCY used alcohol of 850° specific gravity, which represents a mixture containing about 80 per cent. absolute alcohol. As the strongest brandy or whiskey contains but about 56 per cent. alcohol, the concentrated character of the liquor used by DR. PERCY is at once seen. In one case six ounces were passed into the stomach of a dog—a quantity sufficient to cause death in an adult man.

About 1847, BOUCHARDAT and SANDRAS published a treatise on the Digestion of Alcoholic Stimulants and Their Part in Nutrition. They claimed to have found in the blood of animals upon which they experimented, certain derivatives of alcohol such as aldehyde, acetic acid, etc., which fact led them to believe that alcohol underwent gradual oxidation. Their conclusion was that alcohol was ordinarily consumed and burned in the respiration so as to form carbolic acid and water.

LIEBIG in his investigations reached similar conclusions, classing alcohol among the heat-producing foods, such as sugar and fat, in our dietary. The teachings of these chemists may be summarised as follows: Food is force; alcohol is force; therefore alcohol is food. Food, according to LIEBIG, has two offices: first, to repair waste; secondly, to supply animal heat, and under both these heads alcohol stands as a generator of force. The daily consumption of respiratory matter is five times that of plastic or tissue-making matter. All food, says LIEBIG, is burned in the organism, which consumes for the production of heat and force its own tissues and the fuel which never becomes tissue. Alcohol by becoming tissue-fuel prevents tissue waste. LALLEMAND, DURAY, and PERRIN, of the Imperial School of Medicine, in Paris, at-

tacked the doctrines of LIEBIG and claimed, as the result of elaborate experiments of theirs, that alcohol is in no sense a food; that when taken into the stomach and system it does not undergo oxidation or decomposition, and that all of the alcohol ingested passes out of the economy by the respiration and urine unchanged. In their experiments they made use of the potassium-bichloride test. A red solution of this reagent in sulphuric acid is turned emerald green by alcohol. By this test they found alcohol in the sweat, urine, bile, etc., of animals to which they had given spirituous liquors. They detected it also in the blood, brain, liver, and kidneys. They found more of the derivatives of alcohol, such as aldehyde or acetic acid, and their conclusion was that in every instance alcohol, like chloroform, is separated from the blood by the excretory organs unchanged. Like chloroform, they said alcohol had an elective affinity for the brain and liver, and no sooner is it received into the circulation than the system begins an energetic series of operations for its removal. The organs of excretion continue to eliminate it until the blood is entirely free from the poison. They affirmed that there is no more reason or evidence that alcohol is utilized in the body than that ether and chloroform are utilized. The fallacy of their argument can be seen at once. While it will be admitted on all sides that only a certain and definite amount can be utilized in the system and that amount will vary as it must with the peculiar idiosyncracy of the individual, we would also at once see how impossible it would be to collect all the excretions of the body, for twenty-four hours after the ingestion of some alcoholic beverage, extract all the alcohol from these excretions and show that the sum total of the alcohol so obtained was equal to the amount ingested. All this most certainly would have to be done in order to substantiate the doctrines of these scientists.

The most important contribution of the past twenty years to our knowledge of the pathological effects of alcohol, is the work of the late DR. ANSTIE on Stimulants and Narcotics. ANSTIE'S investigations clearly show that alcohol is a food, medicine, or poison, according to the circumstances under which it is taken, and according to the quantities taken. The effect of a small quantity he calls true stimulation, and urges that this is often beneficial and comparable to the effect of food. A large dose produces narcotism and is always injurious except when that narcotism is required for medicinal effect. A small, stimulant dose is physiological; a large, narcotic dose is pathological, and between the two there is a definite poison-line varying with each individual case. He denies that true stimulation is ever followed by reactive depression. True stimulation, whether produced by the oxygen we breathe or by the wine we drink, facilitates nutrition and hence supports life. All food stimulates and every real stimulant nourishes. Such, in substance, are ANSTIE'S doctrines. These views may seem somewhat extreme, but that they are based upon facts much nearer the truth, admits of no doubt. Alcohol retards the destruction of tissue. By this destruction force is generated, muscles contract, thoughts are developed, organs excrete and secrete. Food supplies the material for new tissue. Now, as alcohol stops the full tide of this decay, it is very plain that it must furnish the force which is developed after it is ingested. How it does this is not quite clear. That it enters the blood and permeates all the tissues is satisfactorily proven. LALLEMAND, DURAY and PERRIN contend that it is excreted from the system unaltered. If this were true of all the alcohol ingested, its action would be limited to its effect upon the nervous system, produced by actual contact with the nervous tissues. But there is no more reason to suppose that all the alcohol ingested is thus excreted unaltered from the body, than there is for supposing that all the carbon taken as food is excreted from the skin and lungs as carbonic acid. It is not at all improbable that alcohol itself furnishes the force directly by entering into combination with the products of decay whereby they are again formed into tissue without being excreted as urea, uric acid, etc. These bodies are highly nitrogenous, and under certain circumstances might yield their nitrogen to the construction of new tissues. Upon this hypothesis, so far as I can perceive, can be reconciled the fact that an increase of force and a diminution of the products of the decay of tissue attend the ingestion of alcohol.

Now, it may be supposed that this is only a fancy picture, that it is a theory based upon assumption only like too many others that encumber science. In physiology or hygiene we believe nothing but that which is demonstrated, and even then we do so provisionally, with the full understanding in our minds that if tomorrow new facts are brought forward which appear inconsistent with those upon which a favorite theory rests, and which are of greater weight, the hypothesis shall be abandoned without hesitation.

Now, having briefly set forth the present status of the science with regard to the role of alcohol in the human system, let us review a few of the leading facts as to the hygienic and medicinal uses of alcoholics. The first thought in connection with this side of the question is the use of alcoholics in long-continued fevers. The leading indications as to its employment are derived from its physiological properties, as heretofore enumerated. It retards denutrition, and it excites the nervous system.

Being one of the most important tonic agents,

it excites and energizes the circulatory and respiratory functions. It is especially in cases of blood-poisoning and in fevers of a depressing character, such as typhoid and typhoid pneumonia, and in states of prostration generally, that alcoholics prove beneficial. When the system is laboring under the depressing influence of shock, then also, we see the salutary influence of a little alcohol manifested in a marked manner. Locally applied alcohol has the following properties: As before stated it coagulates albumen, is a violent irritant, even caustic when concentrated, and prevents fermentation and putridity. These properties render alcoholic lotions valuable adjuncts in the healing of wounds and ill-conditioned ulcers, especially when healthy cicatrization and repair are prevented by the presence of micro-organisms inducing septic complications. The coagulating properties of alcohol have been utilized in the treatment of hydrocele, and ascites, pleurisy with effusion, ovarian cysts, etc., the effusion being drawn off by tapping and a spirituous liquid injected.

Is the habitual use of alcoholic stimulants in health injurious? If we look at the example of the Germans who are characteristically a wine- and beer-drinking race, we should answer the question in the negative. There are certain extraordinary occasions of human experience when the use of alcoholic liquors is demanded. First, when there is a demand for unusual exertion. Nerve and muscular energy must be sustained occasionally under severe temporary effort. Persons whose habits are sedentary and whose work is brain-work should use these stimulants with great caution. Coffee or tea is better for them. The glass of wine makes the brain-worker heavy or boozy, and he is unfit for labor until he has had a short nap. The miner exposed to cold and damp during a time of great bodily fatigue, is the better for an alcoholic cordial. Thus many cases might be cited of a similar kind. Another condition in which I have seen alcoholic stimulants useful, is depressing mental emotions. Under their enervating influence, the tissues wear away and the body becomes enfeebled to a degree to which mere muscular exertion could never reduce it. In such cases alcoholics above all other agents, lessen the wear and tear of the mind, increase the assimilative process and arrests the retrogressive metamorphosis of tissue which reduces the strength and weakens all the functional operations of the organism. Hence the instinctive avidity with which those who are over-burdened with care seek to drown their sorrows in the cup. Would it not be wiser to yield to the necessity of recognizing the promptings of nature, and instead of vainly endeavoring to cut off the only source of consolation which many possess, try, while pointing out the true use of alcohol, to show the danger which lurks behind the blessing? As a a restorative agent alcohol has no superior; it quiets the mind, and by its action on the functions concerned in tissue-metamorphosis, enables the organism to retain its former condition, with more safety and rapidity, than if their innate cravings. In countries where the its use were dispensed with.

No circumstance so thoroughly demonstrates the universality of the instinct which prevails for alcoholic beverages than the fact that all nations which possess the material, fabricate something of the kind. The Tartar with his koumiss and the Mexican with his pulque, equally gratify their innate cravings. In countries where the Mohammedan and Buddhist religions prevail, both of which, forbid to the pious, the use of intoxicating drinks of all kinds, they also find a substitute in smoking opium and chewing hashisch. The native east Indian ferments the juice of the cocoanut palm and obtains from it a sour wine, called calla. The natives of Ceylon drink immoderately of a miserable liquor fermented from rice, called arrack. The Siberian savage stupifies himself with a poisonous fungus or by swallowing tobacco, and the maguey and coca were used by the Red Indians as intoxicants before the discovery of America. It is difficult to resist the force of these facts. It shows how powerful are the cravings for alcoholics and how futile must be the attempt to abolish their use.

I have deemed it proper thus to point out the real hygienic and physiological advantages attendant upon the use of alcoholic liquors. Their use, like that of every other good thing which we have, must be guided by wisdom and moderation. To transgress the laws of our being in the employment of these substances, leads just as surely to punishment as the violation of any other sanitary or physiological law. For the offender against the laws of man there may be mercy, but he who outrages the laws which govern his organism meets with inevitable retribution. There is no exception. The punishment may not come to-day nor to morrow, but it is none the less sure. If the offence be slight the punishment is small. The glass of wine too much, proportionately, may cause a slight headache; two too many a slight fever; and three an apoplexy. Like everything else capable of producing good, alcohol is capable also of causing great harm. Our object should be to secure the one and provide against the other.

In concluding this paper permit me to say a word concerning the social aspect of this subject. The wisdom of legislative interference to prohibit the sale of intoxicating beverages can again be tested in Michigan, as quite a number of counties have adopted local option. But will prohibition prohibit? It must, for ages to come, be the great problem of society, how to

regulate the use of alcoholic stimulants and the passion for strong drink, for now, as ever in the past, the tendency to abuse the fascinating beverage is greater than the tendency to make good use of it. Frail human nature sadly lacks sagacity and control when any strong appetite makes its demands. The only rational solution to this problem, I think, is in the highest intellectual and moral culture. JAMES PARTON, in a pamphlet issued a few years ago, heads his article with the question. "Will the coming man drink wine?" Let us hope that the coming man will prize stimulants of a higher social, æsthetic and intellectual order; that he will not so recklessly violate nature's laws, knowing that for all such violations there is sure retribution. Let us trust that he will not abuse his own organism, knowing that intemperance and vice entail exquisite suffering on himself and his offspring. Doubtless, as social conditions improve there will be less and less of that want of harmony between man and his envirionments which drives so many to the lethean bowl. As long as the imperfections of humanity remain unfitted to enviroring conditions, so long evil and misery will continue, and men will seek refuge and solace in strong drink. Increase the sum of human happiness by whatever means possible, lessen the heavy burdens that humanity has to bear, ameliorate the woes of mankind by removing disease and crime by a better physical and moral education, make men more patient to bear the evils that are inseparable from their lot and you will have plucked out the claws and fangs of that dire monster which has so long devastated society. Men will become more temperate because clearly understanding that abstinence from the habitual use of alcoholic stimulants is a requisite for the enjoyment of the highest type of complete and perfect happiness.

A CASE OF EPILEPSY CURED (APPARENTLY) BY THE CORRECTION OF AN ERROR OF REFRACTION.*

BY J. ELLIOTT COLBURN, M. D., PROFESSOR OF OPHTHALMOLOGY AND OTOLOGY IN CHICAGO POLYCLINIC; OPHTHALMIC SURGEON TO COOK COUNTY HOSPITAL, ETC.

The following case, to which I wish to call your attention, first came under my observation in June, 1882:

Mr. T., æt. 24 years, 5 ft. 9 in. in height, weight 160 lbs., well proportioned, features regular, except that eyes are deeply set and appear small; occupation student.

He consulted me for mental confusion and inability to read or study without flushing of face and pulsating of superficial arteries, with sensation of pounding in back of head and neck, with marked sensations of vertigo which would disappear when eyes were closed. At times, following prolonged effort, the confusion of ideas was painful and was accompanied by visions which he recognized as such, at least a part of the time. He had at this time some slight disturbance of digestion and constipation, due apparently to sedentary habits. He admitted masturbation in early boyhood, but not since; had had frequent seminal emissions, more marked during the past two years and always following hard study. I gave him such treatment as his case seemed to demand, with the result of benefitting his digestion; otherwise the case remained about the same. About this time, for some conduct not in accordance with the rules of the institution, he was brought before the Faculty. The President, finding that he had consulted me, came to find out whether the gentleman was really ill, or whether there was good reason for his strange actions and low standing in the school. From him I learned that the patient was constantly manifesting strange mental phenomena, by them attributed to viciousness and low mental and moral character. At times he was extremely dull and morose, and again almost brilliant and exemplary.

I then inquired more carefully into the case from himself and others, and diagnosed a condition bordering on *petit mal*, with impulses. I also found that he was unusually bright as a critic of orations and sermons, while it was with difficulty that he was able to grasp the matter of a printed page. He was advised to leave school for some occupation less sedentary and requiring less mental work. This he did. At the end of the summer vacation he returned apparently perfectly well.

About this time I left that field of work and lost track of my patient. From a student in the institution at that time I learned that for some weeks following his reëntrance he did good school work, but resumed his old habits and, after a stormy time with the Faculty, left the school. After some difficulty, he was admitted to the ministry for which he had been preparing. About two years subsequent to my first acquaintance with him, during a sermon, he was attacked with a marked epileptic seizure, and from that time on he was subject to attacks more or less severe, occurring in the frequency of from one a day to one in two or three weeks.

Restraint was considered advisable, and he was confined in an asylum at intervals for about two years. During one of his more prolonged intervals of immunity from fits, he escaped from the asylum and went to a neighboring State, where he endeavored to resume

* Read before the Chicago Medical Society.

his work, but the return of the malady again unfitted him for ministerial labor and he resorted to canvassing. The study necessary for success in this field soon increased his trouble.

About this time he recalled my opinion and prognosis of his case, and finding my address called upon me for advice. He came to me in August, 1886. I found him at my office in a truly pitiable plight. He had been a number of hours on the cars, and had had numerous seizures more or less severe; he was hungry, bewildered and incoherent, with marked delusions. I hastened to put him in better condition, and on the following day elicited some of the facts given above.

His trouble continued in spite of sedatives, and I referred him to DR. C. D. WESCOTT for examination and advice. DR. WESCOTT gives me the following notes of his case:

"MR. T. first called upon me October 23, 1886. I pronounced him an epileptic as he entered my office, from his appearance alone: the congested countenance and excessively mobile pupil. He described very well seizures of *petit mal* occurring every two or three weeks with or without unconsciousness, frequently followed by uncontrollable impulses and hallucinations. His judgment was evidently impaired, and he presented every appearance of one suffering from the effect of that disease. Among prominent symptoms was his inability to read without the greatest fatigue and nervous irritation. I put him on small doses of the mixture of bromides and gave him careful directions as to diet. The bromides he took only a short time. I gave him a stomach tonic and laxative. He appeared to improve for a short time and then remained in about the same condition, always being irritated by any attempt at mental effort.

"The only attack which I know of his having, following DR. COLBURN'S treatment, was about January 25, 1887. He came into my office feeling unusually well, jovial and lively. A little incoördination was noticeable in his gait, and, in spite of my acquaintance with the precursor of epileptic mania, I was inclined to suspect alcohol. After assuring myself that he had had no liquor, I prescribed saline cathartics and sent him home. In the evening I was sent for and found him in a condition of mild mania, with delusions and hallucinations and a fear of impending evil. The attack was easily controlled with chloral and bromides and he was soon about again, but for some days was dull and depressed and incapable of mental or physical exertion. Since the above indicated attack I have seen him but seldom, and not at all of late, but when I talked with him last his mind seemed stronger, his articulation was more natural, and his countenance wore a more intelligent and natural expression."
—C. D. WESCOTT.

On referring to some private notes made in 1882, I found that I had at that time examined his eyes and obtained .50 D. manifest and 2 D. latent hypermetropia. I at once acted on the suggestion of DR. GEO. T. STEVENS, of New York, who had kindly admitted me to his private cases. I atropinized my patient, verifying my former examination. Also found insufficiency of the external recti equal to 8°, which was treated by exercise with the prisms, soon obtaining a more normal balance of the recti muscles, and prescribed a × 2 D. for constant use. He was directed to discontinue the treatment instituted by DR. WESCOTT. From this time on there was a marked improvement of all his symptoms, mental and physical. During January, 1887, he had a marked attack, as mentioned by DR. WESCOTT, but at that time there was also quite an increase of temperature and disturbance of stomach and bowels, showing that the possible exciting cause of this attack was some malarial disturbance.

For about one year he has had nothing resembling his former trouble. His mind has become active and his personal appearance changed to that of a man in perfect health. And he is now a perfectly well man, taking long trips through the country; the trusted employee of one of our large publishing houses. For about a year he has used his glasses for near work only.

In June, 1887, my patient brought his mother to the city for advice. I referred her to DR. LYMAN, and from him have the following notes:

"The case is one of neurasthenia with tendency to masked epileptic convulsions with vertigo, tottering, and unsteadiness of gait."

DR. LYMAN referred the case to me for an examination of the eyes. I found on examination that there was hypermetropia of 2 D. 1 D. ast. and presbyopia of 2 D., all of which I corrected. Her daughter, who accompanied her, was emmetropic with no nervous tendencies, and resembled her father, while Mr. T. very strongly resembled his mother. Since the treatment instituted by DR. LYMAN, iron, quinine, strychnia, and the constant use of glasses for distance, the mother has improved and is now quite strong and well.

Mr. T. has a brother now confined in an asylum for some form of insanity. I have written for the history of this case. I learned from the mother that the brother of my patient was subject to sick headaches, school headaches, etc., and that he was an erratic child, gradually increasing in peculiar tendencies until marked mental disturbance was developed.

To me the point of special significance is: *the hereditary hypermetropic* error of refraction; in the mother, apparently causing nervous prostration; in the son, all of the progressive symptoms of cerebral disturbance up to

mania; the apparently direct relation, in case of Mr. T., between the amount of work done and the progressive congestion of face and brain; that any return to the use of the eyes would precipitate severe nervous explosions, and that the attacks were seldom caused by other irritation; that the correction of the hyperametropia was followed by a great improvement till, within four months from the time of the adjustment, the glasses had so far relieved his trouble that he has had no nervous explosions to date. Headaches, indigestion, constipation and seminal emissions are perfectly relieved, and the patient is able to do a large amount of work, and read, without trouble. In a letter just received from Mr. T. he says:

"Although I have always desired to be a student of general knowledge yet, whenever I attended school, I was considered lazy and entirely out of my place, and until the latter part of my school days I was made sport of both by my associates and instructors, because they could see no excuse for me, as I seemed to be in perfect health.

"Later on my friends noticed that my face was flushed at times, and my general dulness of expression Many accused me of taking opium.

"In recitation work I always stood the lowest in my class, but in examinations my standing was a great deal better; which, of course, my instructors were at a loss to know how to account for. I do not think that the cause of my poor recitations was laziness, but it was owing to the difficulty which I had in reading. Even aside from the dry reading of text-books I was never able to read more than a few minutes at a time without suffering pain from my eyes to the back of my head, and in fact my whole head seemed to be very much irritated, which made me flighty at times. I would have impulses to jump and scream. These symptoms of disorder were more severe if I did any reading in the evening.

"While sitting alone or lying in bed I would see flashes of light, imagine things, and in my mind would go on a journey and perform dare-devil feats. At times I would be conscious of being in my room during such trains of thought, and at others not. Sleep was an impossibility till 3 or 4 o'clock in the morning.

"This trouble grew upon me until I was forced to leave school. Then I spent my time in going from place to place preaching as best I could, but doing very little reading, and I thought I was getting better.

"About two years and a half ago I was called to attend a funeral. For a few weeks previous to this call I had not been feeling as well as usual. At first I refused to go, but I was finally persuaded to go upon a promise that little would be required of me. I had read but a few sentences from the book which is used on occasions when I saw a quick succession of dark waves pass before my eyes, I lost control of my muscles, and the next I knew I was lying on a bed in the next room. Dr. —, who was standing by me at the time, said that all he noticed until my muscles gave way was that my face flushed a little. However, I was soon able to finish the service and go home. These spells became more frequent and severe till finally I was put in an asylum.

"So far as I know I never had convulsions, and was not always wholly unconscious, but always lost control of my muscles. They never came on unless I overdid in some way either physically or mentally, or under some excitement.

"The asylum gave me temporary relief, but after I had been out a short time the trouble returned. And until I had put myself under your treatment for a few months, I did not think there was any help for me. Since then I have gained in health and am now able to do a good day's work without any symptoms of the old trouble."

DISCUSSION.

DR. E. L. HOLMES: We know the fact that, in very rare cases, the proper adjustment of glasses has cured epilepsy. We know that paring a corn may give relief, but that does not prove that corns are often the exciting cause of epilepsy. There are said to be very rare cases in which small shoes with high heels have produced a general nervous condition—headache and disturbance of the muscles of the eyes. It is useless to adjust glasses in the hope of cure until the general nervous condition has been relieved by "common-sense shoes." A contracted prepuce may be, although very rarely, the exciting cause of epilepsy. So we can go through the whole series of remote nervous irritation producing the trouble we call epilepsy. There are some cases that are exceedingly interesting but at the same time rare. Many of the cases that are reported are simply coincidences. It shows us, however, how important it is in nervous troubles to seek the cause and to have the eyes relieved as far as possible by proper glasses. This may not only cure epilepsy, but also other nervous troubles.

DR. F. C. HOTZ: Similar cases have been reported, especially through the methodical investigations which DR. STEPHENS, of New York, has carried on for the past ten years. It was he who conceived more clearly than anyone else, I think, the idea that functional disturbances in the eye, an over-taxing of the muscles adjusting the sight or controlling the motions of the eyeballs, have a far-reaching influence on the whole nervous system of the human body, and are among the most prolific

sources of nervous diseases. It is well known that irritations of the eye go far to excite reflex irritation somewhere else; I need only refer to the general disturbances created by an attack of glaucoma or iritis. But I believe, in cases like the one reported to-night, the general nervous disorder is not caused by reflex irritation (for there is no irritation in the eyes); but it is the result of an over-tasking of the nerve forces. Every human organism is endowed with a certain amount of nerve force; in some this force is largely in excess over the amount necessary for all demands of the physiological functions; in other persons, however, it is barely sufficient. It is this latter class, which has no reserve force to draw upon, that constitutes the large army of so-called nervous people. Now if in such a person, to whom the nerve force has been scantily measured out, the adjustment of the sight or the harmonious movements of the eyeballs are executed with difficulty, requiring a greater nerve stimulus than under normal conditions, the eyes appropriate a larger portion of the nerve force than they are entitled to; they continuously drain, as it were, the resources of the nervous system, exhausting the supply of nervous force which ought to go to other parts of the organism, and under these conditions a very trifling exciting cause may produce marked neurotic disturbances.

When we read the published observations of DR. STEVENS, based upon 2,000 cases, we cannot help admitting that there is a great deal of truth and logic in his conclusions; even if we assume that a pioneer in a new field is unduly enthusiastic, and perhaps carries his conclusions a little further than the actual facts will admit on cooler reflection and larger experience. We owe DR. STEVENS a great deal for pointing out this subject; it is as interesting to the general practitioner as to the oculist; it will induce the practitioners to pay more attention to the diseases of the eye than they used to. It is a field in which the general practitioner and the specialist can very profitably coöperate, because these cases usually consult the general practitioner first; we do not see them unless they have marked disturbance of the eye, and thus we often accidentally relieve other troubles. I suppose every oculist has had an experience similar to my own, that patients who have been forgotten by us meet us years afterwards and thank us, saying that by adjusting glasses or relieving some other functional disturbance of the eye, they were relieved of chronic headache or other nervous disturbance. It is the systematic investigation of the relation of eye-strain and nervous disorders which I think is the great merit of DR. STEVENS, and such observations as have been reported to-night are valuable contributions to confirm STEVENS' conclusions.

DR. W. F. COLEMAN: In reference to the cause of eye-strain, we see it in three directions: In errors of refraction; in insufficiency of the orbital muscles; and of accommodation, actual or relative. All oculists agree as to the effect of eye-strain in producing peripheral and central nervous symptoms. In my own experience correcting insufficiency of muscle has relieved most severe and persistent headache, such an amount of headache as to induce the general practitioner to send the patient to me for examination of the eyes, to determine whether there was cerebral disease, and there would not be found any optic nerve trouble, but an error of refraction or insufficiency of ocular muscle which, relieved by glasses, relieved the headaches. Migraine is another disease which is frequently relieved by correction of errors of refraction. A few days ago a patient came to me who had a persistent nausea occasioned on every attempt to read, and which, if persisted in, almost induced vomiting. I corrected a trifling astigmatism and the nausea was at once relieved.

As to the cause of epilepsy: if peripheral irritations, as phimosis, calculus of the bladder or irritation of the ovary will produce an epileptic seizure, why not such a constant source of irritation as an eye-strain caused by an error of refraction, or, possibly more commonly still, by insufficiency of ocular muscles?

DR. CASSIUS WESCOTT: As I had the pleasure of seeing the case reported by DR. COLBURN, I would like to emphasize one or two points: I think there can be no doubt as to the patient's epilepsy; his attacks as described and as witnessed by myself were quite characteristic. In some of his attacks he was, no doubt, unconscious, but in others he probably did not lose consciousness. But the condition of unconsciousness is not now regarded as an absolutely essential feature of an epileptic attack. I have seen patients in the Illinois Eastern Hospital for the Insane, who had frequent attacks of *petit mal* and *grand mal*, who were evidently conscious throughout some of those attacks.

As to the treatment of this patient before he got his glasses, I think it could have had very little effect after the adjustment of the lenses, becauses the doses of bromides were small and discontinued entirely before the glasses were used. I believe that any person of a neuropathic tendency may have epilepsy induced by any persistent local irritation, and those of us who have experienced eye-strain know full well what an annoying irritation it is.

DR. J. E. COLBURN: It is a well-known fact that hypermetropia and astigmatism, and any error of refraction that increases the effort of the ciliary muscle, also increases the action of the internal rectus, and almost invariably we get with hypermetropia more or less prepon-

derance of the internal rectus. Of the 375 cases of hypermetropia that I have tested during the past year, with this in view, I have found over 95 per-cent. showing a preponderance of the internal rectus. Not necessarily a lack of strength of the external, but the comparison between the two making it either a preponderance or an insufficiency, whichever you choose to call it. Regarding the method of operating: I had, two years ago this spring, the pleasure of being with DR. STEVENS two or three weeks, witnessing his daily office work. The operation is simply taking the conjunctiva up, cutting through it and then exposing the ocular end of the tendon, grasping this with a pair of forceps and snipping away the central portion of it, not detaching it completely, but leaving it adherent above and below. I know that this will relieve as high as 12° of insufficiency and many times give a result of divergence. In a case that I recently operated on in which there was hystero-epilepsy, a marked case which had been under the treatment of some of our best specialists, the result was a—2, and I only cut the central fibres. I know it, because when I did the operation I felt the attachments above and below. The operation was done four weeks ago; up to the time of the operation she had had repeated seizures, but has had none since. A case that I tested nine months ago has had but one seizure since, although she had been having them almost constantly before that. In this case the treatment was given without the patient being conscious of our object in giving her relief; she had never had any consultation with her physician about glasses giving her relief, and nothing was said to her by the family.

In regard to the statement of no loss of consciousness: It was the patient, not I, that made the statement. I saw him in one attack in my office when I knew he was unconscious. He was under treatment in one of the best Western asylums and had all the care that could possibly be given; but immediately on resuming his work the seizures returned with their old violence. After he came under my observation he attempted in my office to do a little writing, but just as soon as he tried to do anything of that kind I could see the pulsation in his head and neck, the capillaries would show marked distension and he would become morose and sullen, then he would go out and wander about the streets for a few hours and have a seizure on the street or at his boarding place. But since I put him under treatment up to this time he has had but one seizure, and from a flushed, red-faced, brawny looking fellow, a man who looked as though he would have all the bad impulses and habits of drink (many times I thought he must be under the influence of opium or liquor), he has improved until people who knew him before hardly recognize him. When he was at school there was much the same manifestation, though in less degree.

I do not claim that errors of the recti muscles are the cause of many cases of epilepsy, but I think that in certain cases it is so. I have known DR. STEVENS' work for fifteen years. He was my instructor in Albany in 1873, and I have seen his work at intervals during these years. While he is an enthusiast, he is honest and candid, and his work will show him to be a conscientious and an accurate observer. I remember that a few years ago it was almost a disgrace to speak DR. STEVENS' name; it would be said, "Oh, he's the prism crank!" He labored under disadvantages. The question of reflexes had not received its full recognition. But I think any one who has suffered from error of refraction can easily see how an irritation of this kind can produce cerebral congestion and this go on until it explodes in the form of a fit.

I remember a case of a boy of 18 or 20 years who, during the latter part of term of school, would suffer from nervous sick headaches until he would get into a hysterical condition and have to leave school. Bromides and chloral were tried, but all of his school life was marred by this defect, and it was not until the error of refraction was corrected that he was able to do systematic work.

I saw many of DR. STEVENS' cases of epilepsy, and it was wonderful to see the results of two or three weeks' treatment. Patients would come there—drooling, idiotic children, young men and women, and their whole physical condition would seem to be changed. I remember a child, in appearance about 13 years of age, but in reality 18 years old. She was drooling and idiotic-looking, and in three weeks I saw the child and failed to recognize her. Her head was up and her whole bearing changed, and she was bright looking. Before that she would come into the room sullen, suspicious and angry. It seemed almost a marvel, and I do not wonder that DR. STEVENS is many times seemingly extravagant in his statements.

In regard to failure to cure, I think it is well established that nervous cases are the most difficult to manage. There is a certain condition, a neurasthenic tendency acquired or hereditary, and when the predisposing cause is removed there may be for a long time a slight irritation. I have noticed many times in treating cases of chorea, directly due to errors of refraction, that the patient would show marked signs of improvement every time the menses came on, showing that a little disturbance throwing the system out of its usual routine would bring it about.

I call to mind a choreic patient that I first saw on a street car. She was with two women who got her in and out of the car as well as

they could. There was something about the position of her head and eyes that attracted my attention. As they were evidently poor people, I handed my card to them. They called upon me in the course of three weeks. It required the efforts of the father, mother and sister to get the child into the office. Within two months from the time of her first visit and two weeks following her full correction, H. a= + 2, + 1 ax 90, the chorea had almost disappeared—so much so that a person unacquainted with her would hardly notice the unusual motions, and within a year there were no choreic motions except a nervous movement of the hand. Before that she was fast getting into an epileptic condition. Now she is perfectly well, using her glasses. In her case I was obliged to do tenotomy to relieve 80° insufficiency. In the case of Mr. T. I did not do tenotomy, as I was able to overcome the insufficiency. I had plenty of time and I practiced him with prisms for a month or six weeks and then taught him how to do it. I would again call attention to the intimate relation between hereditary nervous headaches, chorea, epilepsy and insanity; to the hereditary transmission of ocular defects and their resulting irritations, and to the apparent frequency with which they occur in the same patients.

PREGNANCY IN A DWARF WITH DEFORMED PELVIS.

BY W. C. HUNTINGTON, M. D., HOWELL, MICH.

On Nov. 28 last, I was told that Mrs. W., a dwarf of this place, was reported six months pregnant. I replied that it ought to be known with certainty, and also whether she were capable of producing a full term child. On the following morning I was called to see her in consultation with her attending physician.

She was 42 years of age, and a perfect likeness of her, both in form and feature, appears in Wood's Cyclopedia of Obstetrics, vol. 3, p. 18. Her head was large, her trunk of rather small adult size, and rather fleshy; but her arms, limbs, hands and feet, were those of a child. She was sufficiently educated and intelligent to be quite successful in teaching district schools. By a digital examination I found the antero-posterior pelvic diameter to be about 2¼ inches but did not find the os uteri. After groping for some time and the vagina seeming to end in a blind pouch, I gave up the search. Upon inquiring with regard to motion, she said that there had been no motion except a sort of crawling sensation, and she said that DR. WADE, of Holly, had removed a tumor, per vaginam, for her about two years ago, but she could not tell us what was the character of the tumor, or its location. Auscultation with stethoscope, palpation and manipulation, gave no signs of life. Ballottement was negative in its results. The appearance of the nipples indicated pregnancy but there was no discoloration of the linea alba, and, although living with her second husband, she had never been pregnant unless she should prove to be so now. The enlargement in the upper part of the abdomen was entirely upon the right side. She was having expulsive pains, and when they occurred there was marked depression at and to the left of the umbilicus, but in the supra-pubic region it extended into the left inguinal region and this portion formed nearly a right angle with the other and seemed somewhat divided from it. As she seemed much prostrated by the hemorrhage of the previous night, and the examination worried her, I advised that DR. WELLS, an old and experienced accoucheur, be called in, and she be examined while under the influence of chloroform. This was done without developing anything further, and we concluded to wait a while for her to recuperate and watch for further developments. Her pains continued with varying intensity for about twenty hours longer, and then ceased, leaving some pain in the left inguinal region, with which she had been troubled for about a month. About twenty hours after the pains ceased, she died rather suddenly in the absence of any physician. We were summoned and obtained permission for an autopsy, which I made in the presence of several physicians. Upon entering the abdominal cavity I immediately came upon some clots and a child that would weigh nearly eight pounds, and having bilateral talipes varus. It had been dead so long that it would scarcely hold together to be lifted out of the abdomen. The placenta was lying loosely within a ruptured pouch of peritoneum in the left iliac fossa, and from the pouch my fingers readily passed through an opening into the uterus. Upon removing the uterus, we found that this opening was the missing os uteri. The fœtal head, unable to enter the pelvis, had been deflected to the left, carrying the os uteri with it, and putting the left utero-vaginal junction upon the stretch. This had finally yielded and allowed the fœtal head to pass out beneath the peritoneum, and so when we made the examination the child's body occupied the uterus while its head was contained in the peritoneal annex, which subsequently ruptured, causing the death of the mother.

"Art's proudest triumph is to imitate nature;" but in cases like this, if I am not mistaken, art has superseded nature, and nature's attempt to perform a spontaneous laparo-elytrotomy produced a fatal failure.

Correspondence.

SYRUP TRIFOLIUM COMP. IN A CASE OF SYPHILIS.

Miss L., age 24, initial sore under clitoris and upon edge of urethra. Although much pain was experienced on micturition, the presence of the chancre was not suspected for ten days or two weeks after its invasion.

Being engaged in the theatrical profession, the patient was not enabled to give herself the care and attention the disease demanded.

In Cincinnati, and about one month after the character of the disease was known, the patient had a severe fall, by the breaking of some scenery, and received a severe lacerated wound of the arm. Before she had recovered she was attacked with rupia, and the company coming to Chicago, she fell into my hands.

Upon examination I found an induration at the seat of the primary sore, slight tonsillitis and pharyngitis, the skin covered with patches of rupia with dry, horny scales upon the face, palms of the hands and soles of the feet, and upon the back. The inner parts of the thighs and legs were the only parts of the body which were free from the eruption. The photograph gives a more accurate idea of the condition than is otherwise possible.

Of the patient's habits it would be proper to state, that upon opportunity she would drink to excess, and to this unhappy propensity she ascribes her present condition, advantage being taken by a man whom she knew to be diseased, while she was intoxicated.

Having read of the good effects gained in syphilitic skin affections by the use of the Syrup Trifolium Comp. (Parke, Davis & Co.), I determined to give it a thorough test in this case, and I commenced the treatment by giving a dessertspoonful every four hours. To the tonsils and pharynx, I applied alternately as occasion demanded, potassium chlorate and ferri chlor., giving a nourishing diet from the outset.

As I had the patient under immediate control (in the Chicago Ophthalmic College Hospital), I was enabled to watch the progress of the disease and treatment with the certainty that my orders were implicitly obeyed.

I continued the treatment four weeks, at which time the eruption had disappeared and the patient was apparently well, with the exception of some indurations about the hands and feet.

At the expiration of this time she desired to quit the hospital and go to friends residing in New York City.

The treatment was continued after her arrival in New York, but being relieved from the restraint of the hospital she fell into her old habits of drinking, and in August, 1887, she reported that while there was no return of the skin trouble, she had suffered epilation. She continued with the remedy, however, until Dec. 20, 1887, at which time she reported herself as perfectly well.

In addition to the report of the patient, I am in receipt, Jany, 18th, 1888, of a letter from a friend, in which she states that "Miss L. has entirely recovered and is looking better than ever."

As this was a well-marked case, in a robust and vigorous woman, I looked upon it as one peculiarly adapted for the trial of the remedy mentioned, and the results have exceeded my most sanguine expectations.

W. T. THACKERAY, M.D.

CHICAGO, ILL.

ANTISEPTIC MIDWIFERY.

Feeling that conclusions, which appear to me to be rendered inevitable by some passages in DR. WARD'S article in the MEDICAL AGE of Jan. 10th, are not duly appreciated by some of the readers of this journal, and that my own remarks thereon are somewhat misconstrued, I

am constrained to attempt a clearer statement of my position.

In view of the following words, quoted verbatim from the article above-mentioned from the pen of DR. WARD, it seems strange that any one could, for a moment, doubt the fact that he occupies a ridiculous position on this subject: "It flattens a man out like a blow from a pile-driver to find, as I have, after upwards of thirty years in active village and country practice, with more than the average of obstetrical cases falling into my hands, that I have been wrong, and not only wrong, but almost criminally wrong, because where there was an opportunity to do so much I have done so little. 'Still, one sweetly solemn thought steals o'er me now,' that in all these years I have never lost but two patients whose deaths could by any possibility be connected with confinement. These were both in the last stage of consumption and both primipara. One died of eclampsia and the other of collapse. Not a single case of septicæmia." If this language conveys any idea to the mind it is that antiseptics are never needed; the proof being that his patients have always got along well without them. It can not be said to strike simply at any particular antiseptic hobby, as is shown by the following: "But listen, 'Still greater is the danger from the physician himself'—I have thought of that a thousand times myself in connection with all diseases—'he can not go home to change his dress and take a disinfectant bath. When once out on his long journey he must see patients in the order of their residences, and thus he may be compelled to go directly from a case of erysipelas or diphtheria to a confinement.'—I have done so repeatedly," interjects DR. WARD, "and it makes me feel like a murderer now—Nay," he says, "a country doctor may even hold an autopsy and thereafter go to a confinement where he must introduce hand and forearm into the uterus in order to perform version,' that means me again. Oh, that my arm had been sawed off ere I had perpetrated such a series of diabolical outrages."

In view of these statements—these interjections—which for the most part express the opposite of what is meant, unless we would make them appear a confusion of meaningless terms (and even I would not permit them to strike my "mug" in so biassed a manner), it appears that DR. WARD disbelieves in antiseptics; it is indirectly asserted. It is plain that he expects the fact that he has gone directly from autopsies and cases of diphtheria to women who were about to be confined, made his examinations and manipulations without antiseptic precautions, and had no bad results therefrom, to prove their uselessness, and that, too, in the very cases where they have been esteemed by men whose opportunities for observation, compared to DR. WARD'S, were as ten to one, to be most urgently demanded. To make it still stronger, if his language is to be understood, he continues in a subsequent paragraph, alluding to the disinfection of the hands prior to vaginal examinations, as recommended by DR. MARCY: "Now there is where I have been criminally negligent for I have repeatedly 'got there' just in time to 'catch on,' and if I had waited half a minute to hold my hand anywhere ("anywhere" includes a basin of soap-and-water) except in the vicinity of the patient's perineum, I should have lost my fee and the confidence of the friends; but still I shall do so hereafter come what will." Taking his expression, "criminally negligent," to mean directly the opposite of what it asserts (as this appears to be the correct rule for interpreting DR. W.'S language—like RORY O'MOORE'S dream, it "wurruks by coutraries"), we have therein indirectly announced that DR. WARD attaches no value to any antiseptic measures, not even to simple cleanliness—the fundamental object of all antiseptics. The agents chosen for this purpose may be diverse, and the operator may choose such as may seem to him most effective or available, but the object certainly is to cleanse the part to which they are applied, of all putrefactive substance (whether "cocci," or what not) that they may not set up therein irritative, inflammatory or pyæmic processes. The points at which my criticism was aimed are that DR. WARD cites his own experience as positive proof of the ridiculousness of antiseptic precautions and treatment, and that he adopts a burlesquing style of argument which he may have seen ere this is unlimited in its application.

What is of much greater importance than loss of fees or the confidence of the friends (or even of blackmailing malpractice suits, as suggested to DR. W. by DR. DOANE, in his comprehensive remarks), is the desirableness of being right, involving as it does the patient's safety, both as regards life and health.

I sincerely hope that rather than preventing discussion, what has been said may serve as a stimulant both to study and discussion of this important practical question. In view of the patent fact that DR. WARD mistakes his own idea and practice of antiseptic midwifery, as exhibited in his first article, for the "barn," I think I may be excused for my dimness of vision when I fail to see it. And, further, I would remind him that the period of "swaddling clothes" often comes *twice* in the life of man, with the difference between the epochs, that its first appearance is at the commencement of a period of progressive development, while its second marks the onset of a hopeless decay.

Lastly, I should like to express my entire approval of the words of the modest and retiring "old man," namely, "It is unfortunate that a

man may not express himself on a scientific question without having the tenor of his remarks misconstrued, or having himself held up as occupying a ridiculous position." With my confirmed deficiency in appreciating a joke it would appear to my unsuspecting mind that this paragraph divides its force about equally between DR. WARD, in having so bravely taken "HENRY O. MARCY, A. M., M. D., LL. D.," to task for his antiseptic notions, and myself for holding Dr. W. to a "literal responsibility for his statements" concerning his many rapid transits from autopsies, etc., to the besides of parturient women! I may, however, assure SENEX that I accept it with the best of grace in the realization of its two-fold appreciation.

M. F. CUPP, M. D.

METAMORA, IND.

UTERINE INERTIA.

In the AGE of Feb. 10th last, on page 52, are "Some Thoughts and Interrogations on Obstetric Practice," by one of your correspondents. It may be that he has not tried the exceedingly great value of a tonic dose of quinine sulphate, in cases of uterine inertia (?) Permit an illustrative case: When practicing in Humboldt County, in this State, I was one night called away into the mountains, a distance of 30 miles, and over a very difficult country. I rode hard all night and reached my destination about day-break (6 A. M.) I there found a woman who had been in labor three days and nights, the child still unborn. The poor woman was quite exhausted with her past efforts. A glance sufficed to show her need of restoratives. I immediately gave a 5 grain dose of quinine. Then a cup of strong tea, etc. In two hours I repeated the quinine, and shortly after had the pleasure of seeing the return of good, regular pains. The child was born at 9 A. M. It had been dead some time and was quite large. It was the mother's first-born; and the woman's age (over thirty) and her toughness of fibre had had their influence in the results here mentioned. I now thought it best to wait awhile for the expulsion of the secundines, as the patient had but little strength left. I, therefore, made her comfortable and left her to sleep for an hour or two. After she awoke, a drachm of fluid extract of ergot, reinforced by a dose of quinine, brought back tone and strength to the tired system, and at 1 P. M. I had the satisfaction of completing labor. The case made an uninterrupted progress to recovery.

In my practice it has been my custom thus to use quinine whenever there appears weakness or tardiness in labor. It gives tone and strength and promotes the physiological act of birth better than ergot, at this stage; and, at the same time, the use of quinine does not involve the danger of retention, as may be caused by the too early use of ergot. At the end of the first stage, or the beginning of the second, a drachm of fluid extract of ergot has done good work in my experience.

G. F. G. MORGAN, M. D.

SAN FRANCISCO, CAL.

HOW TO TREAT CRAMPS IN THE LEG.

Many persons, of both sexes, are greatly troubled with cramps in one or both their legs. It comes on suddenly, and is very severe. Most people jump out of bed (it nearly always comes on either just after going to bed, or while undressing) and ask some one to rub the leg. I have known it to last for hours, till, in despair, they would send for the family physician; and even then, it would be hours before the spasm would let up.

There is nothing easier than to make the spasm let go its hold, and it can be accomplished without sending for a doctor, who may be tired and in need of a good night's rest. When I have a patient who is subject to cramp, I always advise him to provide himself with a a good strong cord. A long garter will do if nothing else is handy. When the cramp comes on, take the cord, wind it around the leg, over the place that is cramped, and take an end in each hand and give it a sharp pull—one that will hurt a little. Instantly the cramp will let up, and the sufferer can go to bed assured it will not come on again that night. For the permanent cure, give about six or eight cells of galvanic battery, with the negative pole applied over the spot that cramps, and the positive pole over the thigh. Give it for ten minutes, and repeat every week for a month.

I have saved myself many a good night's rest, simply by posting my patients, subject to spasm of the legs, how to use the cord as above. I have never known it to fail, and I have tried it after they had worked half the night, and the patient was in the most intense agony. Even in such cases, at the first jerk of the cord, all pain left.

R. W. ST. CLAIR, M. D.

BROOKLYN. N. Y.

CATARRHAL DIPHTHERIA.

In the MEDICAL AGE of March 10th DR. H. B. LUDWIG, Richland, Mich., asks for the diagnosis of certain cases which occurred in his practice during an epidemic of influenza. I had considerable difficulty some years, ago in determining the exact nature of similar cases in my own practice, until light was thrown on the subject by DR. ROBERTS BARTHOLOW. This eminent authority classifies diphtheria according to four well-marked forms, viz.: catarrhal, croupous, septicemic, and the gangrenous.

Since adopting this classification I have had no difficulty in diagnosing my cases of diphtheria, by keeping in view these natural divisions.

The mildest cases of catarrhal diphtheria are not without the special germ of contagion, and even may be followed by diphtheritic paralysis and other sequelæ, although these comparatively seldom occur in the catarrhal form of diphtheria. This form is usually easily managed, but sometimes developes into a more aggravated form.

As the doctor does not want treatment I will refrain from giving a description of it. These cases being, as they certainly are, diphtheritic, should be reported to the Board of Health. I have known them to be contagious on several occasions. I can recall one occasion where a young member of a family had a mild attack of catarrhal diphtheria and made a good recovery, but two others of the same family, who had slept for a time in the same room with the one diseased before I was called, were taken with severer forms of diphtheria, one being the septicemic form.

GEO. F. HUNTER, M.D.

HOLLY, MICH.

JEQUIRITY IN A CASE OF TRACHOMA.

I have had most wonderful success with jequirity. My last case was that of a female, aged 24, with chronic ophthalmia, trachoma and pannus that involved the whole cornea. She had been treated by three regular eye specialists, but continued to get worse until, when I saw her, she could only distinguish light and could not distinguish any object however near to the eye. Under the jequirity treatment the pannus and trachoma have disappeared, and, while the cornea is still slightly clouded, she can count fingers at a distance of four feet and read half inch type. She is still under treatment and is improving rapidly. It has been only 17 days since I took the case.

I do not believe, with good judgment and care, that there need be any untoward results from the use of jequirity.

J. R. KINNEY, M. D.

LYNN, MASS.

"Puck" lays bare one of the weaknesses of woman in the following: Mrs. Park-West—"Do you still have Dr. Arbecam, dear?" Mrs. Stokes—"Oh, yes; I couldn't exist a day without him." "But he doesn't seem to cure you." "No; but just think of the social advantage of having that imported carriage and the two Morocco negroes standing in front of the door for an hour every day. Mathilde, these last violets were not candied enough."

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., MAR. 26, 1888.

Editorial.

THE DETROIT MEDICAL COLLEGES.

The usual vernal activity in local medical college circles was somewhat intensified this year by the advent of another Richmond in the field. The fact that Detroit, a city which has for some time passed the 200,000 mark in population, and is now well on the way of a quarter of a million, has for several years been struggling along with only one medical school, betokened a lack of enterprise very inconsistent with the established reputation of the city. Accordingly a movement was quietly inaugurated about a year ago which was crowned with full fruition on the 19th inst., when, with the authority of the State in their possession, the interested parties proceeded to organize in the capacity of a college faculty. Through a coincidence the birth of the new school occurred on the eve of closing ceremonies for the college year of the old school. It was this coincidence which caused the intensified interest above alluded to.

The Detroit College of Medicine held its annual commencement exercises at the Detroit Opera House on the afternoon of the 20th inst. It conferred the degree of doctorate in medicine on thirty graduates whom it sent forth, under the authority of its diplomas, to do the great mission of the healer. The course of study and training to which this accession to the ranks of the profession had been subjected, was such as to inspire confidence in the ability of the young men to hold their own in the struggle upon which they are about to enter. The public exercises of the commencement were followed by a banquet at the Kirkwood Hotel in the evening, at which the world was shut out, where the fledglings mingled with those who have grown grey in the service, and where the atmosphere was redolent of sentiment and good cheer. The occasion was an exceptionally happy one, and if the new men do not climb the ladder of fame the fault will not lie in the nature of the boost which they received when they were sent forth.

The name of the new school is The Michigan

College of Medicine and Surgery. The requirements under the statutes are a subscribed capital stock of $50,000, of which 50 per cent. must be paid in. These requirements guarantee a well-equipped school, and the building for the occupancy of the new school and the appliances which it contains, are quite up with the times. They are, indeed, quite in advance of those usually possessed by new ventures in the line of medical teaching. The following gentlemen have been selected by the Board of Trustees as a faculty of the institution: EDWARD W. JENKS, President and Professor of Gynecology; CALEB GILBERT, Professor of Obstetrics and Diseases of Children; WILLIAM H. LONG, of the U. S. Marine Hospital, Professor of Clinical and Military Surgery; JOHN J. MULHERON, Secretary and Professor of Pathology and Practical Medicine; HAL C. WYMAN, Treasurer and Professor of Principles of Surgery and Operative Surgery; JAMES W. ROBERTSON, Professor of Laryngology and Hygiene; LEWIS E. MAIRE, Professor of Ophthalmology and Physiology; OSCAR S. J. ARMSTRONG, Lecturer on Anatomy and Venereal Diseases; WILLIAM I. HAMLEN, Lecturer on Chemistry and Physics; ZINA PITCHER, Lecturer on Materia Medica and Therapeutics; DAYTON PARKER, Demonstrator of Anatomy and Director of Clinic.

The Recitation and Clinical term of the College opened on the 22d inst., with a class of twenty students. The regular session will open in September.

THE RADICAL CURE OF HERNIA.

Hernia is of such a common occurrence, and so much has been written about it, that it seems almost out of place to say anything about it now. We have often questioned whether the profession generally was doing its whole duty in its relation to the many cases of hernia which appeal to it for advice and treatment. The fact that quacks and mountebanks, who laud a particular kind of truss, succeed in extorting the most outrageous sums from their victims for the cheapest and flimsiest sort of hernia apparatus, makes it clear to our mind that there is something wrong somewhere. As a rule, when a man consults a doctor for a hernia, the doctor lays the patient down, feels the tumor, pokes his finger into the abdominal rings, asks the patient to cough, and then tells him yes, that is a hernia, go the drug store and get a truss. Very often this advice will be acted upon. A truss will be fitted and in a year or two the patient will be cured by the truss alone. But, also very often, the truss will do the hernia little good, and he will see some advertisement in the newpaper and try another truss, and still his hernia distresses and annoys him. Now, thoroughly digusted, the patient goes to the physician again and ask, "is there no radical cure for hernia?" He is informed that there is, but the answer is usually coupled with a series of hap-hazard remarks about the dangers of the operation and the necessity for certain precautions, which frightens the idea of a radical cure out of the patient's mind. This is not right. If CZERNY, KRAVITZKA, DUMBROWSKI or BROWDUMSKY can cure hernia by an operation without jeopardizing the life of the patient, then Smith, Jones and Robinson ought to be able to do so, and they are. We have lately talked with a distinguished surgeon of the United States Marine Hospital service, who related to us the histories of seventeen cases of scrotal hernia upon which he performed the radical operation with the most gratifying results. Hernia is a very serious infirmity with sailors. While at sea they are liable to strangulation, and have not always at hand skill to reduce it. If the profession would give the subject of the operation for radical cure of hernia a little just study, carefully analysing the cases reported during the last few years, that method of treatment would become more popular than it is now.

NON-OPERATIVE TREATMENT OF UTERINE FIBROIDS.

There are certain fibroid tumors of the uterus which never give the patient any trouble, except as they distort the abdomen and make the patient apprehensive lest she suffer from their growth. There are other fibroid tumors of the uterus which seem to cause, and certainly coexist with a peculiar color and condition of the complexion, commonly known to the profession as uterine cachexia, *facies uterina*, *etc.* There are yet other types of fibroid tumors of that organ which are distinguished by their hemorrhagic character and which are exceedingly dangerous only as they are of a nature to make their removal and management difficult and unlikely to be carried out. The treatment of these several types of tumor is various and admits of grand opportunities for heroics.

To remove a uterine fibroid and the uterus, is an operation sufficiently apalling to justify the epithet "heroic." The frightful fatality of that operation makes the procedure in some cases quite brutal. Of the whole number of cases of fibroid tumors of the uterus, only a very few are amenable to surgical or operative treatment. There are a large number of cases in which neither the knife or electricity (method of APOSTOLI) are capable of doing any good. These cases are left to ergot and such internal remedies as are the result of chance.

There is, doubtless, a wide field for discovery in connection with the constitutional treat-

ment of uterine fibroma. A few facts have an important bearing on the treatment by internal means. One is that these tumors atrophy if their circulation is impaired, another is that certain drugs may be deposited in them and cause changes in their structure. The salts of lime, for example, when used for a long time produce an earthy change in these tumors which if continued may check their growth and induce atrophy.

Notes.

A new anecdote about Ricord, the syphilographer, appears in the N. O. Medical Journal. Mr. Chas. Gayarré says Ricord, at the time, was a bachelor, and "I believe has never married. What was my astonishment, when I entered a very large bedroom, of which the walls, from the high ceilings to the floor, were covered with none but magnificent oil paintings, representing sacred subjects. At the head of the bed was a sculptured oak prie-dieu, on which there was a superbly illustrated copy of the Gospels that was lying open. There was a red velvet cushion to kneel on at the foot of the prie-dieu, surmounted by a beautifully carved ivory Christ on a gilded cross. After a little while I was led to the presence of the medical philosopher, who habitually seemed to delight in being a cynical unbeliever. Guessing at what had passed in my mind, he said with a laugh not unmixed, I thought, with some embarrassment of manner. 'You are surprised, are you not?' 'Certainly,' I replied; 'who would not be? Faith! my first impression was that I had been introduced by mistake into the bed-chamber of the Archbishop of Paris.' 'Well! well! my friend,' he said in a half jocose and half serious tone, 'I hear and see so many unclean things during the day that on retiring at night, I like, before going to sleep, to refresh my eyes by looking round on holy objects.'"

In the "Life and Letters of Charles Darwin" occurs a passage containing the great scientist's opinion of homœopathy. It occurs in a letter to J. D. Hooker: "You speak about homœopathy, which is a subject which gives me more wrath, even than does clairvoyance. Clairvoyance so transcends belief that one's ordinary faculties are put out of the question, but in homœopathy common sense and common observation comes into play, and both these must go to the dogs, if the infinitesimal doses have any effect whatever. How true is the remark I saw the other day by Quetelet in respect to evidence of curative processes, viz., that no one knows in disease what is the result of nothing being done, as a standard with which to compare homœopathy and all other such things. It is a sad flaw. I cannot but think of my beloved Dr. Gully that he believes in everything. When Miss —— was ill, he had a clairvoyant girl to report on internal changes, a mesmerist to put her to sleep, a homœopathist, Dr. ——, and himself as hydropathist, and the girl recovered."

Dr. Cotting, in the Maryland Medical Journal, declares that the practice of medicine must be very disappointing to those who follow it chiefly for the acquisition of wealth. Whoever practices it in a commercial spirit, he says, debases the calling and degrades himself. This is one of the "glittering generalities" with which the air is resonant during this season of medical college commencements, but it does not take the graduate long to discover how much of mere sentiment and how much of real common sense there is in it. We much prefer the following sentiment from doctorate address by Dr. Bailey, to the graduating class of the University of Louisville: "Your position among men requires that you demand a fair compensation for services rendered, from those who are well able to pay. This is an absolute necessity in order that you may secure the largest measure of influence among your fellows within your reach."

The clergy have latterly become much concerned over the future of physicians. Sam Jones says he would not care to go to heaven if he thought there were any doctors there. He doesn't know how it is that the study and practice of medicine makes men irreligious. In his experience it has been a rare thing for him to meet a religious doctor. At the late commencement exercises of the Detroit College of Medicine, the clergyman who made the address, also expressed the belief that there are no doctors "over there." He, however, was not ungracious enough to ascribe their absence to their wickedness, but simply to the fact that there are no sick angels. It did not seem to occur to our reverend brother that physicians could take part or pleasure in the exercises of the place, but that, as is the case here below, they must be doctors or nothing.

In the language of Bro. Jasper, the distinguished Southern divine "the world do move." The latest testimony to the fact is the opening of a Free Law Dispensary, in New York. It now only remains for the clergymen to open a Free Religious Dispensary. The fiction that the gospel is furnished without money and without price has been exploded, and the thirsty for religion have long had to hoe more industriously for advice than those whose physical infirmities press heavily upon them. A Free Religious Dispensary would, indeed, be a great and good charity.

Medical Progress.

ARE CAUTERIZATIONS OF THE THROAT IN DIPHTHERIA, AND THE FORCIBLE REMOVAL OF FALSE MEMBRANES, TO BE RECOMMENDED?—There is no doubt that the prevalent view regarding diphtheria, from the time of Bretonneau to the present day, is that this grave disease, while eminently infectious, is primarily of local origin, not becoming general till after absorption of poison from some limited surface (as the pharynx), which first furnishes lodgment and a breeding place for the *materies morbi* or germ. This view has had striking confirmation from the behavior of wounds in the human subject which have accidentally been inoculated with diphtheritic matter, have become the seat of a pseudo-membranous exudation and a focus of infection, and from such experiments on animals as those of Oertel,* which go to show "that the disease establishes itself first in one spot, the original focus, and and thence radiates, as it were, through the body, until by general blood-poisoning it renders tne organism incapable of life."

Such being the theory, there has ever been on the part of practitioners a disposition to attack the disease *in loco*, and arrest it in its incipiency; this, in fact, to believers in the primarily local character of diphtheria, really constitutes the leading indication. "Diphtheria," says one of our best writers on this disease, Professor Jacobi, "is analogous to the septicæmia of wounded men and of puerperal women, and the local disinfection which has been accepted as the sheet anchor in the treatment of these affections must be, also, the main reliance in that under consideration."

As to the value of local treatment in this disease, there can hardly be said to be any difference of opinion, and all authorities advise cleanliness and disinfectant topical medication. Some, as Billington, Jacobi, and Smith, rely largely on sprays, gargles, and syringing; others, as Liebermeister, make great account of local application of sulphur.

With regard to the energetic cauterizations, and the frequent clearing of the throat of false membranes by swabbing, there has of late years been a general agreement among medical authorities in avoiding these harsher methods, and for the following reasons:

1. Experience has proved that the violent removal of false membranes does no good, the diphtheritic patches being speedily re-formed. Only when the patches are already loose and ready to separate of themselves, is their removal by the brush or swab really beneficial.

2. The milder caustics, as nitrate of silver and perchloride of iron, do not penetrate deeply enough to destroy the multiplying infection, and their frequent application adds to the discomfort of the patient.

3. The stronger caustics (undilute carbolic acid, muriatic acid, caustic potash) are very painful, not easily limited in their action to diseased parts, and are likely to cause dangerous swelling of the tissues.

4. Add that the patient is often a young child, whose opposition and whose struggles make the difficulties in the management of caustic applications well-nigh insurmountable.

*Ziemssen's Cyclop., Vol. I, p. 577.

5. Finally, cauterization of the throat in children has often provoked spasm of the glottis and death from asphyxia; it has also caused lesions of continuity of healthy parts, which has been speedily covered with false membranes.

These considerations, and the results of treatment by cauterization, which have not been encouraging, have led most authorities to renounce caustic agents altogether.

It is worthy of note in this connection that two French medical authorities, LE GENDRE, in the Archives of Laryngology (October, 1887), and GAUCHER, in the Annuaire de Thérapeutique (February, 1888), have endeavored to revive the ancient and nearly absolete custom of treating diphtheritic patches by energetic cauterization and the forcible removal of false membranes. GAUCHER insists on the doctrine that the angina is "the primary accident of the malady." Diphtheria begins in the throat "because this common vestibule of the respiratory and digestive passages is the most exposed to germs coming from the atmosphere." "The false membrane is the source of the infection of the organism;" hence there is every indication to destroy this membrane *in situ*. To the objection that ablation of the false membrane denudes the mucosa, removes the epithelinm, and opens the door to the infection, he replies: "Certainly, if you content yourself with simple ablation of the membrane. You must, at the same time that you remove the false membrane, cauterize the subjacent mucosa. He employs concentrated phenic acid as the best antiseptic caustic agent. The phenic acid, with just enough alcohol to keep it in solution, is a good form, but GAUCHER prefers the following preparation:

℞ Acid phenic, 10 parts.
Camphor, 20 parts.
Alcohol, 10 parts.
Oil of sweet almonds, 40 parts.
M.

This topical agent is, he thinks, less painful than simple carbolic acid; in some cases, however, he prefers the concentrated acid diluted with an equal quantity of sweet almonds. Either of these preparations he regards as an energetic caustic.

A condition of the success of the treatment, according to this writer, is not to be content with "simple touches" or "light brushing," but to endeavor by thorough swabbing or "rubbing" mechanically to detect and remove the false membranes; the underlying mucosa is then left in a deeply cauterized condition, and any further multiplication of germs or spread of the infection is rendered impossible. GAUCHER'S "swab" is the old-fashioned sponge probang, which is allowed to drip well after being soaked in the acid. Several vigorous "rubs" are given at each sitting, till all the false membranes are removed or destroyed. Then the denuded surfaces are brushed over with the caustic liquid. This operation is repeated morning and evening. Gargles, sprays, and irrigations of carbolic acid (one per cent.) are used freely during the day and night.

The pain which attends these topical applications is severe, but may be mitigated by the cocaine (four per cent.) spray. The inflammatory reaction and the difficulty of deglutition

which follow are considerable, but do not, says GAUCHER, constitute a serious impediment to carrying out the treatment, which, in his experience, has been eminently successful. "Out of sixteen cases," he says, "which I have since 1879 treated by this method, I have had as many good recoveries." He admits that this treatment is more applicable to adults than to children, "in whom it is," he adds, "difficult, though not impossible." The two cases which LE GENDRE has reported in the Archives of Laryngology as treated by this heroic method both got well, as also several cases similarly treated by ALBARRAN.

Practitioners in this country will note with interest the heroic activity of these French physicians, who will probably find few imitators this side of the water.—*Boston Med. and Surg. Journal*, March 8, 1888.

HOMATROPINE HYDROBROMATE—A STUDY OF ITS CLINICAL VALUE IN OPHTHALMOLOGY. By JOHN S. STEWART, M. D., of Philadelphia. In an endeavor to bring this subject unbiassedly before the profession, the author has carefully gone over all the current literature, and extracted what seems correct. These researches he has embodied in the present article, and from them drawn certain conclusions.

ACTION ON THE CILIARY MUSCLE.

First. Single instillations of either the one-twentieth or the one-fortieth of a grain of homatropine hydrobromate are insufficient to paralyze the accommodation (Oliver).

Second. Repeated instillations will paralyze the accommodation. The minimum amount thus found to be capable of producing *complete* paralysis of the ciliary muscle in an emmetropic eye is the one fifteenth of a grain, in two instillations of the one-twentieth and the one-sixtieth of a grain each, the latter quantity being instilled at the time of the former's greatest intensity of action (thirty-two minutes after the first instillation).

Third. The maximum amount of the drug recommended and used in repeated instillation for the purposes of examining refraction, so far as has been reported, is a solution of gr. xxiv to the f ʒ j, two to three instillations being required in most cases to paralyze completely the accommodation.

Fourth. Complete paralysis of the ciliary muscle following single or repeated instillations is found to be established in from twenty to ninety minutes, the time depending to a great extent on the amont of the drug used.

Fifth. Careful study of some of the reported cases where a sufficient amount of the drug had been used to paralyze the ciliary muscle distinctly, shows that the fine distinction of astigmatic angles and the estimation of degrees of astigmatism were not positive, and, in some of the reported cases where other mydriatics were afterwards employed, varying amounts of ametropia could be found in excess of what had been measured when the homatropine was used.

Sixth. The duration of the local paralysis is variously estimated to be from thirty minutes or longer to several hours.

Seventh. In cases where the loss of ciliary power was complete, the muscle regained its full action in from ten to seventy-two hours—the time being directly dependent, in the majority of cases, on the amount of the drug used.

ACTION ON THE IRIS.

First. Single instillations of the one-twentieth of a grain of hydrobromate of homatropine, in the majority of cases, are capable of producing complete mydriasis; whilst it is impossible to obtain maximum dilatation by means of single instillations of one-fortieth* of a grain (Oliver).

Second. Repeated instillations cause maximum dilatation of the pupil in the majority of cases. Keyser has observed that the weaker instillations of the drug do not dilate *ad maximum*, whilst the stronger ones, by the irritation which they produce, occasionally cause antagonistic action in the circular fibres of the iris, the result being some contraction of the pupil.

Third. The return to normal of the pupillary diameter is found to take place in thirty and fifty hours respectively after single instillations of the one-fortieth and one-twentieth of a grain are made. The time given by Völckers after the instillation of a one-per-cent. solution is from twelve to twenty-four hours.

ACTION ON THE CONJUNCTIVA.

First. Single instillations of either the one-fortieth, or the one-twentieth of a grain of an absolutely neutral salt are not productive of conjunctival irritation (Oliver).

Second. Repeated instillations cause irritation and hyperæmia of the conjunctiva (Schell, Keyser, Oliver, Jackson and others).

Third. In a few instances, as noticed by Keyser,† and others, acute conjunctivitis has followed repeated instillations of the drug, especially of the stronger solutions.

ACTION ON THE INTERIOR OF THE EYE.

A certain amount of choroido-retinal irritation accompanying the use of homatropine has been observed by Risley and others.

ACTION ON THE GENERAL SYSTEM.

First. Tweedy and Ringer have shown the special action of homatropine to be on the nerve centres, especially the spinal cord. The effect on the heart, as found by them and observed by Hare, was slowing, accompanied by irregularities of force and rhythm.

Second. Toxic symptoms never follow single instillations of minimum amounts of the drug.

Third. Repeated instillations of the quantities noted by the various authors are not frequently accompanied or followed by constitutional disturbance, the few such cases reported being limited to "hallucinations," "incoherency of speech," "drowsiness," "intoxication."

CONCLUSIONS.

First. Single instillations of less than the one-fifteenth of a grain of hydrobromate of homatropine are of no value for the correct estimation of ametropia.

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*Hotz claims to have obtained complete dilatation by the instillation of a single drop of a one-per-cent. solution.

†In a recent article this author states that the use of a perfectly neutral salt, "thoroughly washed from free acid," does not cause the irritation he first observed.

Second. On account of the quick return of the ciliary power and normal size of the pupil after single instillations of the one-fortieth of a grain or less, of hydrobromate of homatropine, this drug is extremely useful in cases where an accurate ophthalmoscopic examination of the media and fundus of the eye is desired.

Third. As a single instillation of an absolutely neutral salt does not act as an irritant, the drug may be thus employed for purposes of precision, even in cases where local irritation exists.

Fourth. On account of the constant local irritant action of repeated instillations of hydrobromate of homatropine, this drug may be considered harmful in certain cases of inflammatory disease, or traumatic lesion of the ocular coverings and tunics.

Fifth. The fact of the constant irritant action of repeated instillations of homatropine hydrobromate on the deeper tunics of the eye, the choroid, and probably to a certain extent the retina, gives answer in great measure why ametropia cannot be properly estimated; hence the drug should be avoided in the correction of refractive error.

I here desire to express my thanks to Dr. Charles A. Oliver for many valuable suggestions and assistance given in the preparation of the present paper.

THE PROBLEM OF DISSOLVING URIC-ACID CALCULI.—Ever since urinary calculi were first recognized, the attempt has been made to find some means of dissolving them in the body. The operation of lithotomy, though not particularly hazardous under favorable conditions, too often hastens death to be attempted when milder means will cure. The brilliant experiments in the laboratory as to the solubility of calculi, at first led physicians to believe that their removal was a very simple matter, but, unfortunately, clinical experience in no way justified this inference, and, as time went on, the prevention and dietetic treatments were the only ones in use.

At the instigation of EBSTEIN, JAHNS (Archiv d. Pharmacie, vii, 1883), in Göttingen, studied this subject, but he made the mistake of forgetting that substances, however capable of dissolving uric-acid calculi outside of the body underwent great changes in their passage through the body and often lost their effect. As an example of this is given the carbonate of lithium, which ordinarily forms with uric acid the most soluble compound, while, when taken internally, it appears in the urine, in combination with chlorine, as the chloride of lithium, a most insoluble substance.

EMIL PFEIFFER and F. BERGMANN ("Verhand. d. V. Congr. f. in. Med.," Wiesbaden, 1886, S. 444) came nearer to the clinical aspect of the question when, instead of using the mineral waters themselves, they took the urine passed after the use of the mineral waters, at the same time taking into consideration the individual peculiarities of the individuals themselves. POSNER and GOLDENBURG followed the method of PFEIFFER, by taking two hundred cubic centimetres of filtered urine from individuals to whom had previously been given one of the drugs or mineral waters supposed to dissolve the calculi. This urine was passed through a filter containing a known quantity of chemically pure uric acid. At the beginning of these experiments they took two hundred cubic centimetres of "normal urine," that is, urine from one individual to whom none of these drugs nor mineral waters had been given. These two hundred cubic centimetres of normal urine were passed through a filter containing a known quantity of chemically pure uric acid, and, after the uric acid had been weighed, it was found not only to have lost by the filtering action of the urine but even to have slightly increased in weight, the normal urine exerting no solvent action on the uric acid.

After experimenting with a number of alkaline mineral waters, among which were Vals and Vichy (Grand Grille), and also with such drugs as the bicarbonate of soda; Cantani's alkaline powder, consisting of bicarbonate of soda; effervescing carbonate of lithium, borax, the boro-citrate of magnesia, and a remedy called "litholydium," they found that these remedies, although not having exactly the same effect on the urine, made it less acid or even alkaline, increased its amount, and, *pari passu*, decreased its specific gravity. The conclusion seems to be, that the bicarbonate of soda deserves the lion's share of the success, and the two most beneficial mineral waters, Vals and Vichy, are richest in sodium. The other effects of this treatment, namely, the increase in amount and decrease in specific gravity, are not to be left unconsidered. The solvent power of the urine increases with its lessening specific gravity, and the large quantity washes out and dissolves the small gravel. Experience showed that such waters as Vals or Vichy were more powerful than twice the quantity of a water one-half as effective; *i. e.*, that the concentration was important. Also, the mineral waters were much better than the salts contained in them and taken in the same doses, for the effect was most marked when the urine was slightly acid or neutral, intense alkalinity of the urine causing a precipitation of the almost insoluble salts and earths; the mineral water containing free as well as combined carbonic acid, a slightly acid or neutral reaction was easily maintained.

Now, what can be deduced from the above experiments for the benefit of our patients? There are cases of the uric-acid diathesis where deposits may be formed in the kidneys, leading to attacks of gout. If it is a question of an acute attack, then the most powerful means should be used, as Vichy and Vals water. Unfortunately, the waters of these springs are not always accessible, and often expensive, and so a resort to the bicarbonate of soda, in doses of from fifteen to seventy-five grains a day, taken in divided doses in large quantities of effervescing water, is often advisable. The next best thing is Cantani's effervescing powder or the carbonate of lithium. In the more chronic conditions, and in the interval of an attack, the weaker mineral waters, or such drugs as the boro-citrate of magnesia or borax, are to be recommended. Too long use of CANTANI'S powder is not to be advised, on account of the lithium and potash contained in it.

In the whole treatment it is necessary to control the reaction of the urine as far as possible, and not let it go too alkaline. The difficult thing is to completely dissolve large calculi.

Such a thing is possible, but almost more difficult in proportion to the surface exposed to the volume of the stones. EBSTEIN seemed to think that the effect was principally due to the flushing action of the increased quantity of urine; but POSNER and GOLDENBURG are convinced that the mineral water or drug in medium doses is borne well and exerts a favorable solvent action on these calculi. These experiments are certainly very valuable, and the treatment is one to which all patients will willingly submit. The dangers of using mineral waters in excess has of late been pointed out, and these should be considered in the treatment.—*N. Y. Med. Record.*

ACUTE RHEUMATISM.—In a recent report of the Collective Investigation Committee of the British Medical Association (British Medical Journal, February 25, 1888) DR. WHIPHAM has analyzed 655 cases of acute rheumatism, chiefly sent in by country practitioners, to which class the profession is largely indebted for the valuable material composing the previous reports of this Committee.

Of the cases, 57.25 per cent. were males, and 42.25 per cent. were females. It is interesting to note how few cases were in children under ten years old, only 32 in all; 80 per cent. of the cases occurred between the twentieth and fortieth years. Of occupations, that of domestic servant heads the list with 71 cases, which DR. WHIPHAM attributes in part to the inordinate consumption of alcoholic drinks to which persons in this station of life are addicted, and also to the want of proper exercise with its consequent accumulation of nitrogenous compounds in the tissues. To this should be added a still more important factor, the damp, ill-ventilated rooms in which persons of this class pass a large proportion of their time.

Very careful inquiries were made as to the habits of those attacked. An elaborate analysis is given of the course and complications in the three classes—teetotallers, temperate, and intemperate persons. It is stated that on the whole the figures are in favor of the teetotallers, except in three important points: first, the average duration of the attack was 23.6 days in the intemperate males against 25.27 days in temperate males, and 27.26 days in teetotallers; secondly, the percentage of deaths in teetotallers is more than double that of temperate persons; and, thirdly, the percentage of heart affections is in teetotallers 51.41 against 40.59 in temperate and 46.87 in intemperate males.

The general opinion that rheumatism is more prevalent in low, damp localities is not borne out by the figures, for by far the larger number of cases occurred in high, dry, exposed regions. More than 47 per cent. of the cases occurred when the atmosphere was damp, cold, and cloudy.

Of antecedent illness 24.12 per cent. of the patients were the subjects of tonsillitis, 13.43 per cent. had had scarlet fever, 2.59 per cent. had suffered with anæmia, and in only 1.98 was chorea either antecedent or concomitant. Considering the close relationship believed to exist between rheumatism and chorea, it is rather remarkable that in such a large series of cases, 655, there should have been only 13 instances of chorea. Of recent antecedents to the rheumatic attack, exposure to cold and wet, particularly when combined with over-fatigue, were the most frequent, occurring in 366 cases. Over-fatigue alone, either sudden or prolonged, was present in 64 cases.

A very full analysis is given, illustrating the influence of treatment on the fever, the pain, and the duration of the attack. There were seventeen different combinations employed, into fourteen of which the salicin compounds entered. The favorable effect of these remedies is shown in shortening the period of fever, in lessening of the pain more quickly, and in reducing the duration of the attack. The largest number of cases were treated with the salicylate of sodium or potassium, and the average duration of the fever was 8.65 days; of the pain, 10.18 days; and of the whole attack, 19.03 days. Of the the total number, 655 cases, 536 were treated with salicin compounds, and in only 22 cases did they fail; in this number the salicylates failed in 16 cases.

Of cardiac complications, pericarditis and endocarditis occurred synchronously in 57 cases, and in 54 cases pericarditis occurred alone, making a total of 111 cases, 16.94 per cent., in which the pericardium was involved; of these cases 6 died. In 77 cases heart murmurs developed, which disappeared with recovery, and in 128 the murmur originated in the attack persisted. The mitral systolic murmur was present in 94 of these cases. Of other complications, pneumonia and pleurisy were the most frequent, 11 cases of the former and 13 of the latter. Hyperpyrexia occurred in 4 instances, 3 of which proved fatal. In 1 case the temperature rose to 110° on the twenty-first day.

Seventy patients suffered relapse; it was impossible to say whether or no the treatment had any influence in this respect, though over 97 per cent. of these cases were taking the salicin compound.

Death occurred in 22 cases, 3.30 per cent., in the majority of the cases with cardiac complications.

A special value is attached to these reports of the British Association, as the returns are sent in, as a rule, by family practitioners, and we are in this way gradually acquiring statistics of disease in private practice.—*Med. News.*

THE TREATMENT OF CHRONIC ULCERS.—DR. WILLIAM STUART LOW, writing in the Brit. Med. Jour., February 20, maintains that there is no danger in the perfect cure of long-standing and much-discharging ulcerated surfaces, and cites in evidence the case of a male, aged 48, who had suffered for twelve years from a very extensive ulceration of the right leg. During this time a great variety of treatment had been tried—rest, bandaging, baths, and numerous internal medicines. The case was of extensive serpiginous ulcer, almost one mass of broken surface on each side of the knee, back of the calf, and popliteal surface, and even extending to the posterior surface of the thigh, at some points granulating, and at others sloughing, bleeding on the slightest injury. The surfaces were deep, and the edges raised and hard, with much surrounding induration. The discharge was very offensive, and this especially so from the grumous pus expressed from num-

erous sinuous channels ramifying about the limb.

The writer being determined to make one last endeavor, commenced by washing the whole surface thoroughly with a solution of bichloride of mercury, of the strength of one drachm to eight ounces of water; this was practiced daily, syringing most carefully every part of the wound, and with speedy benefit. The discharge rapidly lessened, the fetor diminished and the sloughing ceased. New granulations sprang up all over, although not without considerable loss of blood from recurrent attacks of hemorrhage as the dead tissues separated and the feeble granulations gave way. The dressing consisted simply of lint wrung out of the bichloride lotion of similar strength, and applied directly to the wounds.

In addition to this, iodoform proved of very marked utility as a local anæsthetic. Used freely in the form of a fine powder, dusted upon the affected surface, it relieved the pain, contributed greatly to the comfort of the patient, and facilitated the daily dressing. It proved valuable also in quickly inducing healthy action in the indolent portion of the ulcer, and, as an antiseptic and deodorizer, maintained a perfect sweetness of the discharges.

It was observed, in the local employment of powdered iodoform, however, that its use must not be persisted in too long, or the healthy action obtained is soon undone, the granulations breaking down under its continued action, and much bloody discharge staining the dressings; indeed, a blood-stained dressing, where iodoform had been applied, became the indication to cease its employment there. While preparing the wound for cicatrization, by stimulating the surface, it rather retarded the growth of the cuticle, and simple dressing with bichloride lotion proved more efficacious. Lastly, its application to an inflamed surface should be studiously avoided, as it tends greatly to aggravate it.

The beneficial effect of these remedies is more remarkable, since the patient could be induced to give his leg but little rest. It was here that the third important point on the treatment proved invaluable; the use of resilient pressure, in the form of a Martin's elastic bandage; this was applied daily over the dressings, from toes to thighs.

In six weeks after commencing these measures, the cure was complete; and DR. LOW trusts that such encouraging results will animate many to undertake the successful therapeutics of chronic ulceration.—*N. Y. Medical Times.*

A CHEAP AND EFFECTIVE TEREBINTHINE BATH.—The following is a simple device for making a very agreeable and effective terebinthine bath. This method of preparing a turpentine bath is probably well known to, and been used by many others, the process being so simple I presume they have not thought necessary to publish it. If it has been so published, I have not seen or heard of it. It only occurred to me during a recent and painful illness, and is as follows: I was being treated by my friend Professor J. R. Leaming; one portion of his treatment, upon which he particularly insisted, was that certain portions of my body (back and chest particularly) should be rubbed twice daily with a mixture of oil of turpentine and vaselin. These applications gave me great relief, nevertheless I cannot say I looked forward with pleasure to them, as almost every movement was painful. At this time the idea of replacing the rubbings by a turpentine bath occurred to me. But how to make the bath so that the oil should not float on the water, but be thoroughly and evenly mixed with it, was the qustion. I thought of the different methods that I had used turpentine in in my practice. The mode of using it with soap, for rectal injections, seemed practicable for bath use. Thereupon I had my nurse make, in a large bottle, a saturated (six ounce) solution of "old yellow soap." When prepared, three or four ounces of oil of turpentine was added and the contents well shaken. This formed a very nice, creamy-looking emulsion. I had my bath-tub filled with hot water, and half the emulsion added. I was then placed in the bath, which exhaled a very pleasant and distinctive pine odor. (The unpleasant and pungent vapors from the turpentine seem to be changed by emulsifying.) After remaining in the bath about five minutes, I experienced a decided feeling of relief from pain, and a genial glow over all the immersed portions of my body. After remaining fifteen minutes I was put in bed, when I soon felt a decided (not unpleasant) tingling or pricking sensation of my skin. In a short time I fell asleep, and when I awakened I was much freer from pain than at any time during my sickness. The baths were continued as occasion required, until my convalescence. Judging from the effects on my own person, I believe that they will prove especially useful in the following diseases, viz., rheumatism, gout, insomnia, laryngitis, bronchitis, and in the early stages of eruptive fevers. There is only one precaution that I know necessary to be taken in using turpentine locally, *i. e.*, to protect all, especially sensitive and denuded, parts by the application of some salve, as cocoa-butter, simple ointment, etc. These home-made terebinthine baths have the following to recommend them, viz.: They are equal, if not superior, to any of the pine extracts used for baths; they are much cheaper, costing only a few cents; they are cleanly, having an excess of soap; every physician will find at or near the house of his patient the materials for making, viz., water, soap, and turpentine.—Howard Pinkney, M. D., New York, in *Medical Record*, March 3, 1888.

SYRUP OF TAR IN WINTER COUGH.—Tar is undoubtedly one of the best remedies for chronic bronchitis and winter cough, but the difficulty is to know how to give it. In an article which appeared in the Journal in 1875, I recommended that it should be given either in capsules or in pills made with lycopodium. Both these methods have their disadvantages, and I now use the syrupus picis liquidæ of the United States Pharmacopœia prepared as follows: "Tar, six parts; cold water, twelve parts; boiling distilled water, fifty parts; sugar in coarse powder, sixty parts, to make one hundred parts. Upon the tar contained in a suitable vessel pour the cold water, and stir the mixture frequently during twenty-four

hours; then pour off the water and throw it away. Pour the boiling distilled water upon the residue, stir the mixture briskly for fifteen minutes, and set it aside for thirty-six hours, stirring occasionally. Decant the solution and filter. Lastly, in forty parts of the filtered solution dissolve the sugar by agitation without heat."

It is stated in most of the dispensatories that the syrup contains six grains in the drachm, but Mr. Tanner, of the Westminster Hospital, tells me that in reality it is not much stronger than the old-fashioned tar water. This, however, is a matter of little importance, for by the addition of ammonia or other alkali it can be prepared of almost any desired strength. I usually give it in doses of from two to four drachms every three hours, or even oftener. It is by no means disagreeable to take, but should the taste be objected to it can be flavored with syrup of Virginian prune made according to the following formula: "Wild cherry in No. 20 powder, twelve parts; sugar in coarse powder, sixty parts; water, a sufficient quantity to make one hundred parts. Moisten the wild cherry thoroughly with water, and macerate for twenty-four hours in a close vessel; then pack it firmly in a cylindrical glass percolator, and gradually pour water upon it until thirty-five parts of the percolate are obtained. Dissolve the sugar in the liquid by agitation, without heat, add the glycerin and strain." The tar is an excellent stimulating expectorant, whilst the wild cherry is not without influence in allaying cough. The efficacy of the combination may be greatly increased by the addition of a little apomorphine. I use the 2 per cent. solution of the British Pharmacopœia, and find that six minims may be given frequently without exciting nausea. Many patients take ten minims perfectly well; but in a few cases, in delicate women especially, it induces vomiting. During the last two years I have used this method of treatment in nearly a hundred cases of chronic bronchitis and winter cough, and have every reason to be satisfied with the result. The cough is relieved, expectoration is rendered easier, and the patient usually sleeps well the very first night. The syrup of tar alone without the apomorphine is admirably adapted for the treatment of the coughs and colds of children, and has none of the disadvantages of preparations containing opiates.—William Murrell, M. D., in *Brit. Med. Journ.*, March 3, 1888.

Rectal Alimentation in Children.—Jacobi, in the *Archives of Pediatrics* for February, 1888, advises as follows: The rectum absorbs but it does not digest. Whatever, therefore, is to enter the circulation through the lower end of the alimentary canal must be dissolved before being injected. Suspension alone does not usually suffice. Water can be introduced in quantities of from twenty-five to one hundred grammes (one to three ounces) every one, two or three hours, and may thus save life by adding to the contents of the thirsty lymph-ducts and empty bloodvessels. Salts in a mild solution will thus be absorbed. Food must be more or less peptonized before being injected. The peptones mentioned above are readily absorbed when fairly diluted. When too thick they are not absorbed, become putrid, and a source of irritation. Milk ought to be peptonized. The white of eggs becomes absorbed through the addition of chloride of sodium. Kussmaul beats two or three eggs with water, keeps the mixture through twelve hours, and injects it with some starch decoction. The latter is partly changed into dextrin. Fat, when mixed with alcohol, becomes apt to be partly absorbed. Andrew H. Smith recommends the injection of blood. Its soluble albumen, salts and water are readily absorbed: more we ought not to expect. Still, he has observed that the evacuations of the next day contained none of the injected blood. Whatever we do, however, and be the rectum ever so tolerant, not more than one-fourth part of the food required for sustaining life can be obtained by rectal injectiones, and inanition will follow, though it be greatly delayed. Finally, children are not so favorably situated in regard to nutritious enemata as adults. In these the lengthening of the nozzle of the syringe by means of an elastic catheter permits of the introduction of a large quantity of liquid; indeed, a pint can be injected, and will be retained. But the great normal length of the sigmoid flexure in the infant and child, which results in its being bent upon itself, prevents the introduction of an instrument to a considerable height. It will bend upon itself; besides, a large amount of contents will be expelled by the feeble or resisting young patient. When a solid instrument is used, it is apt to be felt high up in the abdomen. This is the result of a large portion of the intestine being pushed upward with the tube.—*Med. News*, March 10, 1888.

The Use of Methylal in Delirium Tremens.—In the Therapeutische Monatshefte for February, 1888, Krapft-Ebing, of Graz, gives brief clinical histories of 21 cases in which he obtained quite remarkable results from the use of methylal in delirium tremens, and nearly all of them were discharged in from two to four days entirly well. The sleeplessness, which was naturally the most prominent symptom in nearly every case, aside from the other cerebral disturbances, yielded with remarkable rapidity to the drug, and, along with the banishment of the insomnia, the terrors and nervous excitement were relieved. In every case he used the drug hypodermically, in the dose from 7½ to 15 grains dissolved in distilled water.

On the other hand, the conclusions of Mairet and Combemale are by no means so favorable, for they found that at the outset of acute mania, doses of as much as a drachm and a half or two drachms failed to quiet the patient, but later on succeeded. In the three cases in which alcoholic mania existed, the results were entirely negative. Further than this, they conclude that the drug, to be of any use, must be given in constantly increasing doses. It is proper to state, however, that Mairet and Combemale gave the drug by the stomach.

Krafft-Ebing was often forced to repeat the hypodermic dose of the drug within a short time, but a single repetition was generally all that was needed. As the latter writer has had a much wider opportunity for using methylal than his French brethren, and as his results were so uniformly good, the drug is well worth trial in this class of cases by our readers.

It will be remembered that methylal is a pure somnifacient, and that it causes no secondary depression, as do morphine and chloral. When given in very large doses, it probably kills by both respiratory and cardiac failure; and very large doses are apparently necessary to cause death.

The larger doses had better not be given hypodermically, since great pain, and even sloughs, may result. This is evidently one of the reasons for the small doses used by KRAFFT-EBING.

LIPANINE—A SUBSTITUTE FOR COD-LIVER OIL.—In the Therapeutische Monatshefte, February, 1888, DR. J. VON MERING has an interesting paper, in which he discusses the relative merits of brown and white cod-liver oil, and expresses the opinion that the generally admitted superiority of the former is due the fact that it contains a larger percentage of oleic acid than the latter does. This opinion has led him to make an artificial compound of olive oil and oleic acid—6 parts of the former to 100 of the latter—which is less objectionable than brown cod-liver oil, on the score of taste, and which seems to possess many of the nourishing properties of the latter. This compound is now introduced in Germany under the name of "Lipanine." According to VON MERING, it is not disagreeable to the taste or smell, and it is very easily digested. It is easily emulsified in a weak alkaline solution, corresponding to the alkalinity of the contents of the bowels, and hence it is easily absorbed by the lacteals of the intestines. As a result of this fact it is possible to administer it in large doses and for a long time without arousing disgust or causing indigestion. VON MERING has given lipanine to more than 40 patients in six months, 30 of them being children. All took the campound well, and it will never cause nausea, vomiting, indigestion, or diarrhœa. The children to whom it was given were scrofulous or rachitic; and of the adults, four had phthisis and ten had diabetes. In all these cases the patients gained in weight and their general condition improved. The dose administered was from one to four teaspoonfuls daily to children, and from two to six teaspoonfuls daily to adults.

The results of the administration of lipanine, announced by VON MERING, suggest the advisability of testing this remedy in this country. It is so easy to make and so convenient to administer that enterprising pharmacists may be expected to place it soon before the medical profession of America. A palatable substitute for cod-liver oil is a thing much to be desired, and we hope this one may prove of value as its inventor believes it to be.—*Med. and Surg. Reporter*, March 10, 1888.

DIGITALIS IN THE TREATMENT OF PNEUMONIA.—The use of digitalis in croupous pneumonia has often been recommended, usually in small doses, as a heart-tonic, but by some as a sort of specific. It has been claimed that the exhibition of very large doses of digitalis tends to abbreviate the course of the disease very remarkably, as well as to reduce the mortality. In most of the statistical tables prepared by the advocates of this method the defervescence is seen to occur from the sixth or seventh to the tenth day, which is the time at which the disease subsides ordinarily, so that not much would seem to be proved as to the virtue of the drug regarded as a specific.

In a recent graduation thesis, DR. ILIE N. ANTONIU, of Bucharest, reports 142 cases of pneumonia treated by PROFESSOR PETRESCU with large doses of digitalis, and compared the results obtained with the average statistics of pneumonia. The digitalis was given in very large doses—from one to two drachms of the leaves in infusion in the 24 hours. In no cases, however, were any evil effects from these large cases observed, and the fatal secondary heart-depression, so feared by some authorities, did uot occur. From a careful comparison of the cases reported, it does not appear that the disease was materially shortened, the defervescence occurring in most of the cases at the usual time. The mortality, however, was much below the average, the percentage being only a little over one, while in all the other tables the mortality is given as from 3 to 24½ per cent.

The author's conclusions, which are somewhat extravagant, are that it is possible to abort pneumonia by large doses of digitalis, especially if the treatment be begun early in the course of the disease. He maintains, also, that from 60 to 120 grains of digitalis-leaves may be given in infusion in the 24 hours without any fear of heart-failure resulting from over-stimulation and subsequent fatigue.—*Med Record*. March 10, 1888.

EUCALYPTUS IN TYPHOID.—In a paper in the *Practitioner* for May, 1885, MR. LEIGHTON KESTEVEN, of Brisbane, Queensland, pointed out the great benefits to be derived from the administration of oil of eucalyptus in the treatment of typhoid fever, and the very successful results he had obtained therefrom in a large number of cases. Doubts having been expressed as to the diagnosis, *i. e.*, whether it was true typhoid he had been treating, the writer in another communication to the *Practitioner* (April, 1887) gives the grounds for his belief in the correctness of that diagnosis in the great majority of the cases. In view of the symptoms they presented, it would be necessary he thinks, to doubt the accuracy of received teachings to reject typhoid fever as the complaint suffered from. Practical experience leads him to believe that the fæces are rendered antiseptic by the administration of eucalyptus, as he has never seen the patients treated in this way catch the disease.

In the general range of MR. KESTEVEN'S cases the duration of the illness till the complete establishment of normal temperature has varied from a maximum of twenty days in one case to the minimum of eight days, the average duration has been about fourteen days.

The mortality since he wrote his former paper on the subject more than two years ago has been absolutely *nil*. He has not lost a single case of fever of any kind, and he has had a large number constantly under treatment, all having been typhoid with the exception of a few cases put down as "low fever," for accuracy. (In the vital statistics of the colony of Queensland, typhoid fever stands third in the list in order of fatality.)

On this he would recommend a very thorough

trial of eucalyptus in all zymotic diseases. In typhoid he believes it to be a specific remedy.

A Danger Ahead of Antipyrine.—A conviction has deep root in the popular mind that antipyrine is a sovereign remedy for seasickness. The good results from this remedy have been widely published, and as seasickness is a matter of public interest—an emergency which all seek to avoid—the general press have drawn upon medical journals for the vaunted information as to what will cure and prevent the detested ailment. Now, undoubtedly there have been well-authenticated cases of benefit in seasickness by the use of antipyrine. It may even be admitted to be a good remedy, so far as remedies go, in that most unmanagable disorder; but we cannot help feeling that antipyine is becoming too familiar to the public. Its excellent powers are being presumed upon. We see it figuring daily in newspaper paragraphs, and doubt not it may presently be sold like bromo-caffeine, which is now "on tap" in many saloons and drug-stores. Of course, this is a mere speculation; but the fact is, that there have been a number of cases of poisoning from antipyrine reported in our medical journals lately, and some of these have resulted from very moderate doses. The excessive and indiscriminate use of comparatively new remedies is an outgrowth of our modern system of liberal advertising. Owing to the cheap reputation which comes of appearing constantly in print, a drug may acquire, in a few months, a celebrity which formerly grew only out of long acquaintance and knowledge based on experimentation. Enthusiasm ought never to carry us away. Discretion and progress are not antagonistic. A physician would better not swallow every drug he hears recommended.—*Med. Register.*

Stimulants to be Avoided in the Treatment of Skin Diseases.—In an article on diet in cutaneous affections, by Dr. G. H. Fox, the following suggestions occur: One very important point to be considered in preparing a diet list for patients with skin disease, is the effect of alcohol, tea, coffee, and tobacco in retarding tissue-metamorphosis. To improve nutrition of the skin, it is desirable that the processes of waste and repair be carried on without cessation. When alcohol or other stimulants are consumed to any extent, this desirable change or reconstruction of tissue is arrested, and the various organs of the body are impaired in the performance of their functions. The effect of beer upon an eczema is as marked as it is upon a gonorrhœa. Dr. Fox has sometimes thought it better for a patient to drink a whole bottle of whisky than a single glass of malt liquor. In cases of pruritus, in private practice, the author has fallen into the habit of forbidding all stimulants, on the ground that they do no good and may do harm. In charity practice it has often struck him as the height of folly to prescribe medicine for patients who are living largely on tea and beer, and whose symptoms would speedily disappear under a judicious regulation of diet. Indeed, it is difficult to appreciate what dietetics will do in the treatment of cutaneous and other diseases unless we move, for the time being, a suspension of the Pharmacopœia.—*Dietetic Gazette*, Jan., 1888.

Antiseptic Tooth-washes.—At a recent meeting of the Odontological Society of Pennsylvania, Leffmann reported his experience as follows:

Several formulæ for antiseptic tooth-washes have been offered as fulfilling the indications here referred to, and, with a view of testing the practical value of these, I made up two forms, and present them for consideration by the members. In my opinion they are both rather too strong, and can only be used very much diluted with water. This will, of course, interfere greatly with their antiseptic effect. Besides this, they are necessarily retained in the mouth for a very short period, and even if we suppose that they penetrate into all parts of supportive structures, they do not remain long enough to do any good. I give herewith the two formulæ, both of which I have used, and find the first the most agreeable:

Thymol, 4 grains.
Benzoic acid, 45 grains.
Eucalyptol, 220 grains.
Alcohol, 3 fluidounces.
Oil of wintergreen, 25 drops.

Use a teaspoonful in about three tablespoonfuls of water as a wash.

Thymol, 20 grains.
Alcohol, 1 fluidounce.
Glycerin, 1 fluidounce.
Water, enough to make 1 pint.

Use as above.—*Dental Cosmos*, Feb., 1888.

Saccharine in Diabetes.—Dr. Charles W. Purdy, of Chicago, in *The Journal of the American Medical Association*, February 25th, writes: In brief, we are justified in the following conclusions in reference to the use of saccharine in diabetes:

1. That in this product we possess a flavoring agent for food and drink, the palatability of which is quite equal to that of the finer grades of sugar, and which may be used by diabetic patients with the greatest impunity.
2. That, through its antiseptic properties, it retards the abnormal fermentative changes in the stomach so common in diabetic patients—thus promoting digestion and relieving flatulence.
3. That, while as yet we are without sufficient practical data to judge of its blood effects in large doses in diabetic patients, yet both chemistry and physiology would indicate its use for the purpose of favorably influencing some of the more fatal complications of the disease.—*Med. Register*, March 10, 1888.

Alum in Typhoid Fever.—Dr. Paoletti has treated sixty cases of typhoid fever, with excellent results, with crude alum alone. He remarks that this drug has formerly been used only as a styptic and an astringent, but now that its antiseptic properties have been recognized it is clearly indicated as a remedy for abnomal fermentations in the intestinal canal. —*Brit. Med. Jour.*, Feb. 4, 1888.

The Medical Age.

Vol. VI. DETROIT, APRIL 10, 1888. No. 7.

Original Articles.

CLINICAL LECTURE—EXAMINATION OF THE PATIENT.*

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Gentlemen:—I have deemed it advisable at this opening of our clinical term to dwell somewhat in detail on certain points in the examination of the patient which have, possibly, not been exhaustively discussed in the didactic courses which you have attended.

I desire to indelibly impress you at this stage in your medical studies with the paramount necessity of making each individual case which consults you the subject of especial study and observation. To the conscientious practitioner who desires to achieve the fullest measure of success in his chosen calling, there are no degrees of importance in the cases which come under his care. The superficially most trivial case may, to his mind, have an underlying element of danger to the life of the patient, and he can set his mind at ease only by that thorough and minute examination which the hidden element cannot escape. Practitioners, moreover, are successful or unsuccessful according to the degree of the acuteness of their powers of observation, and this acuteness, while, doubtless, existing naturally in a highly perfect state in some, must for the most part be the outcome of systematic training. Analyse the causes of failure in the case of those, alas! too many, who have hopefully started out on the road upon which you will soon set your feet, and, in the vast majority of instances, you will find them to consist chiefly of lack of attention to their patients—with this lack of attention there being, of course, lack of that careful scrutiny of the individual case which can alone ensure success. The patient, too, soon loses confidence (an important factor in therapeutics) in the physician who manifests in his hurried, superficial examination, a lack of interest in his case. A knowledge of anatomy, physiology, chemistry, etc., is, of course, an important qualification in a physician, but how profound soever it may be it cannot take the place of a knowledge of that psychology through which the confidence of the patient is secured and maintained. In this psychological process the careful examination of the patient bears an important part.

The Decubitus.—On entering the bedroom you observe whether the patient is sitting up, either in a chair or in the bed, or lying down, and from the position in which he sits or lies you will often be enabled to secure the key to the diagnosis of his disease. The sick man generally assumes his position instinctively, to relieve as much as possible the suffering due to his disease. In organic or inflammatory conditions, however, he may be compelled to assume a position contrary to his desire and not conducive to ease, but whether voluntary or compulsory the position may be valuable in diagnosis. For instance, if on entering the room you find your patient in the dorsal decubitus (lying on his back), with his knees drawn up and bent, you may at once assume that he has an acute attack of peritonitis, and direct your inquiries along that line. Should he be found in a curled-up position, the limbs and head all being flexed as closely as possible on his body, the position will point to cerebral meningitis. Should the inflammation, however, have extended down the spine, involving the meninges there, the posture will have undergone an almost diametrical change, the head being thrown back and the back bent backwards to form a bow. In one-sided pneumonia or pleurisy the patient persistently lies on the affected side, and this position, taken in connection with the hurried respiration, is highly instructive. In great prostration the patient cannot maintain his original position with his head on the pillow, but sinks towards the foot of the bed. An inability to lie down points to disease of either the heart or the lungs. In asthma, for instance, the patient sits up, and bending forward rests his elbows on his knees. He assumes also practically the same posture when there is pressure on the main bronchus, as from an aneurismal tumor, the flexion contributing to the relief of the pressure. In the severer valvular affections of the heart the patient cannot lie down, and his posture taken in connection with the appearance of his face points very directly to the seat of his trouble.

The Facies.—Having observed the patient's posture, you will next most naturally look at his face, and here too you will often find much to help you in making a diagnosis. A

* Opening lecture of Clinical Course.

number of conditions attest their existence by the appearance of the face. Words cannot describe all the variations of this appearance, and only the eye trained by long experience and observation, can detect them and see in them their full significance. The grosser appearances and their meanings can, however, be described. For instance, we have the facies of anæmia. Here the paleness of the face and lips, or prolabia, show the deficiency of red blood-corpuscles in the system, and the fact of its existence prompts an inquiry at once into the cause. When to the paleness is superadded a greenish cast, we refer to the condition which it indicates as chlorosis, a form of anæmia supposed to have some connection with uterine derangement. The opposite condition, or unnatural fullness or congestion of the features, amounting sometimes to lividity or blueness of the face or prolabia, is one which is frequently encountered. It may exist in the habitual drunkard, but usually points to dilatation of the right ventricle, due to mitral lesion. It is also found in a variety of pulmonary affections, as capillary bronchitis, pleurisy with large effusion, pneumonia, acute tuberculosis, and, in short, in all conditions in which there is interference with the proper aeration of the blood. Pressure on the descending vena cava, as by a tumor, laryngeal spasm and the cold stage of intermittent fever, are all accompanied by this facies. In kidney affections accompanied by albuminuria, we have a pallor of the face and a puffiness of the face or under the eyes which is quite characteristic. The appearance of the face, its sallowness and slight puffiness are very familiar to the practitioner in a malarial region. The face of the typhoid-fever patient, in the latter stage of the disease, as well as in the typhoid condition that sometimes supervenes in other diseases, is dull, dusky and expressionless. In carcinoma, to the anæmia is superadded a waxy or straw-colored cast, the appearance being known as cachectic, and when occurring in a person who has reached middle age should strongly excite suspicion, even though no localized tumor can be detected. In pneumonia the circumscribed redness of one or both cheeks with clearly-defined edges is characteristic. In acute peritonitis the upper lip is drawn up over the teeth, giving the features a sardonic expression. This appearance is not always present in peritonitis, but when it does occur it points very directly to the difficulty. The staring expression due to projection of the eyeballs points to Graves' or Basedow's disease—enlargement of the thyroid bodies. In intense anxiety or pain we often find a pinched expression which is quite characteristic. In shock due to severe injuries the experienced surgeon will promptly make his diagnosis from the pallor of the face, the frightened look and the oscillating eye. A countenance serious on one side and having the indescribable appearance of life on the other indicates hemiplegia. The jaundiced, melancholy look of the pa tient suffering from some affection of the liver will be a familiar sight soon after you have entered upon practice. The thickened upper lip, the delicate skin and fair complexion of scrofula and a great many other appearances of the face which cannot be described will become familiar and valuable in arriving at a diagnosis, as you grow in experience and observation.

There is just one more facies to which I desire to call your attention—the facies hippocratica. When you observe this do not make any further effort in the line of therapeutics. When it is seen your patient has irrevocably entered the valley of the shadow of death. The hippocratic face is so called because of the graphic description given it by the Great Master—a description which admits of no change by way of improvement: "A sharp nose, hollow eyes, collapsed temples; the ears cold, contracted and their lobes turned out; the skin about the forehead rough, distended and parched; the color of the whole face green, black, livid or lead colored." It is the physiognomy of approaching dissolution.

The Skin.—Having noted the facies you take your patient's hand for the double purpose of determining the condition of his skin and the rapidity of his pulse. Many assume to determine the degree of pyrexia by feeling the skin. Perhaps long experience may enable a man to declare the presence or absence of fever by this test, but I am free to confess that after an experience of hard on to twenty years I am not able to do so. The quality of the skin as to dryness or moisture, and coldness or warmth, is, however, important in diagnosis. It is a fair indication of the condition of the secretions generally. With the hot, dry skin, due to suspension of perspiration, we have a general checking of the secretions throughout, and *vice versa*. Coldness of the skin shows weakened capillary circulation and is common at the onset of many acute diseases, showing the impression made on the nervous system by the cause of the disease. The heat following shows that reaction has set in. When the coldness is protracted, whether accompanied by dryness or clamminess the fact shows a lowering of the vital force which is very portentous. A relaxed skin indicates general constitutional relaxation, and the touch educated by years of experience will be able to convey a very correct impression of the patient's constitutional condition.

The Pulse.—For the physician to omit to feel the pulse and look at the tongue of his patient would be for him to lay himself open to the charge of indifference, at least. And yet how many are there who really find in the pulse or

the tongue as they examine it, anything of diagnostic value? I imagine that the examination is, for the most part, made in a purely perfunctory manner, or as a result of habit, and largely as a concession to the popular conception of the duty of the physician. But rightly interpreted, both pulse and tongue speak a very intelligible language, and it shall be your duty here to study that language, although the story which it tells may not always be trustworthy. There are two methods of taking the pulse; one is by the fingers and the other is by the sphygmograph, an instrument which fitted to the wrist, records in a lineal tracing the "form" of the pulse. The instrument is, however, not adapted to general use, and the finger must remain as the only practical means of receiving the impression of the pulse.

The contraction of the heart by throwing the blood into the aorta causes a sudden change in the fullness of the systemic arteries, which is shown in dilatation and elongation of the vessels. The artery in which this change is most manifest is the radial, and as this vessel is most conveniently reached the pulse is almost always taken at the wrist. The impression there received enlightens us as to the action of the heart, the condition of the artery and, to a degree at least, as to the state of the blood. Inasmuch as we know something as to how certain systemic conditions affect heart and arteries and blood, we are enabled through feeling of the pulse to learn something of the systemic condition of the patient. The importance of the pulse in diagnosis is, however, not nearly so great as the patient is usually led to infer from the careful attention which the medical attendant is apt (through force of habit, doubtless) to devote to it. But as you will be obliged to defer to the popular, and to an extent the professional views on this matter, it will become you to understand as much as you may of the indications furnished by the pulse. You will learn much through years of experience which you will not be able yourself to communicate to others.

When we feel the pulse we take note of its frequency, its rhythm, its volume and strength, and its resistance. The frequency of the pulse, as already intimated, reveals the degree of the activity of the heart. Sex, temperament and individual peculiarities have such an influence on the pulse that it is impossible to assert positively what is its normal rate. As a rule, however, the limits of health are sixty and seventy-five beats per minute in the adult male. In the female the beat is usually slightly faster. A more rapid pulse than eighty in the male, while not indicating positive disease is sufficient to cause a closer examination. The frequency of the pulse is influenced by the age of the patient. During the first year of life it runs from 125 to 136 per minute and gradually diminishes in frequency up to adult life, remaining stationary until old age sets in, when it usually becomes slower although in rare instances its speed is accelerated with advancing years. As a rule the rapid pulse is a weak pulse.

Why it is that the pulse, or the heart-beat, becomes slow or fast in disease has thus far been a subject for speculation. The following explanation seems to me quite satisfactory: The involuntary or unstriped muscular tissue is stimulated to contraction through the contact of the blood, or rather the red blood-corpuscles —the oxygen-bearers to the tissues of the body. When these constituents fall below their normal quantity, as in anæmia, the stimulating property of the blood is weakened and the contractions of the heart are consequently enfeebled. From the same cause inhibition is weakened and we thus have the rapid, feeble pulse of debility. In fevers and inflammations the materies morbi circulating in the blood imparts an irritating property to that fluid, and until the tonicity of its fibre has become impaired through the enforced action to which it is incited, the contractions of the heart are rapid and strong.

A hard pulse offers abnormal resistance to the fingers. It is proportioned to the force of the heart's action and the tonicity of the artery. It is the pulse of inflammation in the plethoric, and is relieved by venesection, purgatives and arterial sedatives. Softness, the opposite to hardness, indicates feeble ventricular systole. When very full, through deficient arterial tone, it imparts to the fingers a feeling as if air, and not fluid, were passing through the vessel. It is then known as the gaseous pulse.

The term "full pulse" explains itself. Standing by itself it has no especial diagnostic value. It is only when associated with other qualities that it becomes significant. The small pulse takes its name from the apparent diminution in the calibre of the vessel. In its extreme degree it is known as the filiform or thready pulse, and indicates extreme weakness of the ventricular systole. It is the pulse which ensues in diseases in which death results from slow asthenia. Associated with hardness it is known as the "wiry" pulse and is then characteristic of acute peritonitis. A strong pulse and its antithesis, a weak pulse, scarcely require description after what has been already said. By an irregular pulse we, of course, mean one in which the rhythmical succession of beats has been disturbed. Before deciding a pulse to be irregular it is essential to make a number of careful observations, for it requires but a very slight movement of the fingers to create the sensation of irregularity, and unless the mind is firmly fixed on the task of taking

the pulse error is apt to creep in. The interruption of the rhythm may or may not be an unfavorable symptom. Occurring in a very nervous subject, or in connection with deep emotional excitement, it means little. The pulse may also not occur at the wrist although the heart has contracted, the contraction being too weak to propel the impression. In such cases the irreguiarity is apt also to manifest itself in relatively strong and weak impressions on the fingers. An irregular pulse may occur from digestive troubles or from debility, but it is more frequently the index to some cerebral or cardiac difficulty, and when it is found the necessity for the closest scrutiny becomes imperative. It may occur also in the course of pneumonia, capillary bronchitis, œdema of the lungs, pleurisy with large effusion or hydrothorax. It then indicates over-distension of the right heart and a consequent insufficient supply of blood to the left side. Occurring under these circumstances it is generally associated with more or less lividity of the prolabia. A purely intermittent pulse may exist in perfect health, owing to individual idiosyncrasy, and unless it can be associated with some organic lesion it need not excite apprehension.

The following summary by DA COSTA puts the matter of the clinical signification of the pulse very clearly: A hard, full pulse occurs in active inflammations, and in most of the acute diseases of robust persons. A hard pulse, full or small, bounding or not, if unconnected with acute symptoms, leads to suspicion of cardiac disease, or of any affection of the artery itself. A tense, contracted and frequent pulse is met with in a large group of inflammations below the diaphragm, as in enteritis, peritonitis and gastritis. A frequent pulse, full or small, but rarely tense, is the pulse of most idiopathic fevers. A very frequent pulse, but very feeble and compressible, is the pulse of marked debility, of prostration, of collapse. A pulse frequent and changeable in its rhythm, is produced, for the most part, either by disease of the heart or brain.

PHYTOLACCA DECANDRA FOR BRONCHOCELE.

BY J. D. ELY, M. D., MEDINA, MICH.

Presuming further record of my experience with phytolacca in the treatment of bronchocele will be read with interest, I herewith append notes of six cases under treatment with it since my last report in the AGE.

Of this series of cases four are females and two males, their ages ranging from twelve to forty-five years.

Four have been discharged cured, and one of two still taking treatment is very nearly cured, in fact would have been cured before this had treatment been taken regularly.

Three of the four successful cases were treated with phytolacca alone, and the one nearly cured is using it singly.

I do not mention this, however, because I think it the best method of treatment, but to show the positive curative effect secured by testing phytolacca singly—the only true way to determine the exact value of a drug—as well as illustrate that it is the most active curative agent in the prescriptions used, as I have always claimed it to be.

I still think it best to give some good tonic with the phytolacca, as it is indicated in most cases, and, it is my observation, hastens the cure.

Three of the series of cases to which I call attention now are selected for special mention, as they seem to me of more than common interest and value.

Number one illustrates that it is advisable to be cautious in using phytolacca, as it records the only unpleasant effects I have observed of it, though the result was, happily, favorable.

Mrs. W., aged 45, had been afflicted with goitre for nearly 35 years. I prescribed for her phytolacca, to be used externally, and taken in five-drop-doses, alternating with a prescription of dialyzed iron, three times a day.

I was surprised to learn that a single dose of the phytolacca as ordered caused much nausea, and that the second produced free emesis, and such prostration as to greatly alarm the patient and her family.

Having never before had any bad effect from prescribing phytolacca I naturally ascribed the unpleasantness in this instance to other causes, and determined to try it again. To see if I could discover any other cause, however, I stopped giving it for a week when, without the knowledge of the patient, who said she would take no more of it, I gave, in combination with dialyzed iron and glycerin, phytolacca in one-drop doses, to again test its effects.

The result was I came near losing a valued patron, as the phytolacca again caused such unpleasant stomach trouble that the lady refused to take further internal treatment, and did not. However, on my urgent request, she continued the local use of phytolacca and, in about four months, the enlargement of the glands had disappeared.

I can not satisfactorily account for the unpleasant effects the phytolacca produced, though it may be that the condition of the patient caused by the change of life, through which she was then passing, made her more susceptible to its toxic effect.

Case No. 2 is that of a boy, twelve years of age, who was brought to me for treatment of recent swelling of the glands in the groin and

popliteal space. His leg was semiflexed and he was unable to walk; the swellings were hard and painful; the temperature 100.

I noticed that the glands of the neck were also enlarged, but they were not sensitive or painful. On inquiry I learned that it had been so for a year.

I prescribed

℞ Tinct. aconiti rad., gtt. x;
Tinct. phytolaccæ decan, gtt. xx;
Aquæ, ʒ iv.

M. Sig.—One teaspoonful every two hours, and ordered tincture of phytolacca applied, full strength, to the enlargements, three times a day.

In ten days the swelling in the groin and popliteal space was gone, and the boy able to attend school.

In about three weeks the enlargement of the thyroid glands disappeared under the local use of phytolacca alone.

This is the most speedy cure of any case of goitre I ever treated and, with the exception of the ten days noted, as phytolacca was used singly, it furnishes one of the best proofs of its curative action and value.

Case No. 3 is exophthalmic goitre of six years standing. Patient a female, aged twenty-seven years. Another physician had treated her without success, and she came to me August, 2, 1887.

She had all the nervous symptoms characteristic of the disease; was anæmic; pulse very irregular and sometimes so rapid that I was unable to count it. Both thyroids were much enlarged, and the eyeballs were very prominent. The bruit sound produced by the blood passing through the carotid arteries was such as led me to think aneurism existed. Menstruation, which appeared at the proper age and had always been regular before the glandular enlargement appeared, had been absent for a year.

Without promise of success further than removal of the enlargements of the glands, I began treatment, giving, first, in combination, phytolacca with dialyzed iron and glycerin, and ordering applications of the phytolacca tincture, according to my usual method.

Of other treatment, veratrum viride and pulsatilla were first given to control the heart's action, and the nervous symptoms—one drop dose of each every four hours—scutillaria tincture in one-half teaspoonful doses with one to two drops of Cactus grandiflorus, was substituted for the above for a time, and with good service.

To correct the menstrual derangement I gave the following, which I have found useful in many other cases, particularly dysmenorrhœa and where the menses are delayed on account of taking cold:

℞ Fl. ext. cimicifugæ rac., ʒ ij.
Fl. ext. pulsatillæ nig., ʒ j.
Syrupus simplicem, q. s., ad. ʒ iv.

M. Sig. One teaspoonful before each meal for two or three days before the expected period and, at the time, every three hours till the flow becomes normal, when it should, usually, be discontinued.

The veratrum was omitted when my patient was taking the above.

Under the treatment noted she has improved quite rapidly. She gained sixteen pounds in weight the first four months, menstruation reappeared and has been normal and regular for the past three months, so that the cimicifuga and pulsatilla have not since been required.

The glandular entanglement is hardly noticeable. The unpleasant nervous symptoms have mostly disappeared. The bruit heard over the carotids is not nearly so pronounced, though still easily recognized. Pulse regular, but yet too rapid. The appearance of the eyes has changed but little, if any.

The patient expresses herself as feeling well and has hopes that by continuing treatment, she will fully recover.

While complete recovery seems to me doubtful the result obtained is so encouraging that I shall continue treatment in expectation of seeing greater improvement, at least, if not the complete cure of the case so much desired.

In concluding, as this will probably be the last article I shall write on this subject for some time, I would take the opportunity to again request physicians to give phytolacca a fair and impartial trial according to the methods I have suggested, and to report results, believing, as I do, that it will prove its superiority as a therapeutic agent in the diseases for which I have recommended it, and that it will amply repay further investigation.

AN IMPROVED LARYNGEAL TUBE.*

BY F. E. WAXHAM, M. D., CHICAGO, ILL.

Unexpectedly I found my name upon the programme to-night. I regret it because I did not intend to present these instruments until I had some further experience. My experience with these modified tubes is limited to four cases, which of course are too few to allow me to speak with authority in regard to them. The most earnest advocates of intubation have never claimed that the operation has been fully developed, and it will undoubtedly be years before the instruments are perfect. This new device is the outgrowth of the rubber epi-

*Exhibited and described to the Chicago Medical Society Feb. 20, 1888,

glottis that I have used considerably. The rubber attachment in many cases worked admirably but would often fail, partly due to the disarrangement of the epiglottis on introduction, or more frequently, perhaps, to disarrangement afterwards from frequent coughing, so I have long been at work trying to find some way by which we could close the upper opening of the tube without danger of any disarrangement upon introduction or later by coughing. I have devised this metal epiglottis, that acts by means of a spring made of piano wire, which is embedded in the upper part of the tube. This epiglottis works very lightly indeed. As the child swallows the epiglottis falls and the larynx rises, and this metal attachment covers completely the upper opening of the tube and when the swallowing ceases the spring forces it upward. The only danger I see from this instrument is from the rusting of the wire and its breaking if used too long without being changed. If made of gold it will not be necessary to change the spring so frequently.*

My first case was seen in consultation with DR. QUINE. The patient was a little child four years old. Several months previously the child had suffered a severe attack of nephritis and had never fully recovered. Four or five weeks ago the child had an attack of scarlet fever; the nephritis was aggravated and the amount of albumin in the urine greatly increased. Following scarlet fever came diphtheria, and the larynx becoming involved it seemed a hopeless case, on account of the complications. To relieve the urgent dyspnœa, the O'Dwyer tube was inserted, but scarcely with the expectation of recovery. During the first thirty-six hours there was almost entire suppression of urine. The child was frantic for water and as every attempt at drinking caused violent coughing it was thought best to remove the tube, hoping the child could breathe without it. The tube was removed and a membranous cast about two inches in length was expelled, but it was impossible for the child to breathe without the tube and this modified one was introduced. There was a great contrast between the ability to swallow with this tube and the other. The child died, however, about eight hours later from uræmic poisoning.

The next case was seen in company with DR. PARSONS. This was almost a malignant case of diphtheria. There was albumin in this case also, and it seemed, if possible, more hopeless than the other. There was repugnance to food of any kiud; the child would not take nourishment before the tube was introduced, and of course there was the same difficulty afterwards. When she would make the effort she could swallow without difficulty. This child died about thirty-six hours after the operation.

The next case was seen through the courtesy of DR. ROBERTS, of Lemont. There was some diphtheritic infection, several children in the family had had sore throats and there had been small spots seen on the tonsils. The child had been suffering urgent dyspnœa for forty-eight hours; I never have seen more urgent dyspnœa than in this case, there was very deep sinking in of the thorax with every inspiration, the pulse was rapid and feeble, and the child could have lived but a few hours longer. This tube was introduced and the child was able to take nourishment very nicely and without coughing, and took liquids comfortably. The child wore the tube for forty-eight hours and expelled it, and has made a good recovery.

The next case was seen at Blue Island, through the courtesy of DR. KAUFMAN. The child still wears the tube. The child was five years old and suffered from urgent dyspnœa, this form of tube was introduced and he was able to swallow water without coughing, but after the tube had been in about half an hour he rejected it, it was reintroduced and he rejected it again. A larger tube was introduced which has been retained ever since. The report is favorable, and as the child has worn the tube this long we shall hope for a recovery in this case.

I think if we are able to allow a child to take fluids a larger proportion of them will recover. Many children object to semi-solid food and it is difficult to feed them, while they would more readily take liquids which would often agree with them much better. While these tubes may still need some changes I confidently expect that they will answer the purpose.

DISCUSSION.

DR. F. O. STOCKTON: It seems to me that there are two or three features in these tubes which are radically wrong. In the first place, the hinge exposes a roughened surface on the inner side of the tube which might afford a lodgment to any membrane which may be loosened and worked into the tube from below, and prevent its passing out. Not only that

*Since reporting the above TRUAX & Co. have constructed for me a non-corrosive spring.

but in this hinged opening there is a chance for the lodgment of septic matter, so that all tubes must be very carefully disinfected, and every one does not believe in such thorough antiseptic measures as some of us do.

Another point is the action of the epiglottis. Those who have read the abstracts of the International Medical Congress at Washington, will remember the paper by CARMALT JONES, of London, upon the action of the epiglottis in swallowing. While I do not agree entirely with DR. JONES, of London, I believe its ordinary action is the true one. We are taught that it acts like a trap-door, that it closes over the entrance to the larynx. I do not believe it has any such action; the muscles attached to it are not sufficient to cause such an action; the base of the tongue does not expand back and downwards sufficiently to cause such action. While it may, to a limited extent, be pressed backward by the base of the tongue. I believe there is another action of the epiglottis than guarding the entrance to the larynx from foods and liquids. We have ascertained this much from experiments. We have taken birds and animals and removed the epiglottis and found that liquid and food does not enter the larynx when they swallow. We have seen it in man, when from ulceration the epiglottis is destroyed, they are still able to swallow food and liquids with impunity; so it seems to me the lid on this tube is of very little benefit. It seems to me that the fault in intubation is that we do not intube deep enough, making the shoulders thinner and introducing them below the false vocal cords so that they rest upon the true vocal cords, and then the false vocal cords can close up against themselves and close the entrance to the glottis. I think the mistake in intubing is that we have let the tube rest on the false instead of the true vocal cords.

DR. E. F. INGALS: I am much interested in this device of DR. WAXHAM'S; it seems to me an excellent idea, and I fail to see the many objections that DR. STOCKTON has mentioned. I apprehend that the amount of mucous, or false membrane, or septic material, that would catch about that little hinge would be a trifling matter considering the large amount already in the throat. It would seem from the report that this tube has acted favorably in some cases. I do not think the administration of liquids is as important as is commonly supposed. In this disease we like patients to have food, but for the four or five days that they wear this tube I believe it of little consequence whether they take either liquid or solid food; there is no danger of starvation.

In the past week I have seen a case of colitis in a child, who was sick three days without taking a particle of food, not even a drop of milk, and I never saw a patient do as well as that child did, with such a disease. I think we often make a mistake in attempting to feed our patients so much, thinking we are building them up when we are really retarding their recovery, because the foods taken are not digested.

I do not fully coincide with DR. STOCKTON about the action of the epiglottis; I believe that the epiglottis has a very important function. The fact that it may be removed and a person swallow well is nothing. It certainly covers the larynx in ordinary deglutition, and I think that is its function. The elevation of the larynx pressing backward of the tonge during deglutition is sufficient in the majority of cases to cause the epiglottis to hold accurately over the larynx, though I confess it is not always sufficient, else patients would not have the trouble they experience from partial paralysis of the depressor muscles. The gentleman's remarks with reference to setting the tube low down do not seem to me borne out by the experience of those who had the greatest experience in intubation. The danger of tubes passing into the trachea I think has been very much underestimated by the profession; it is probable that when this accident occurs we ordinarily hear nothing about it. Not long since I heard of a case which seemed authentic, at the autopsy of which the tube was found in the bronchus. I had myself an unfortunate case this winter. The tube introduced was an ordinary O'Dwyer tube with a good-sized head. The child did well and seemed to have recovered, when on the fifth day I attempted to extract the tube. As I had the tube nearly out the extractor slipped; I tried repeatedly, and the extractor slipped again and again, until finally the tube slipped into the trachea, and I had to do tracheotomy to remove it. About two hours afterwards, during the absence of the attending physician, the child died. The friends insist that it died from the shock of the operation. Any one who has talked with DR. O'DWYER must think his experiments in this matter have been very thorough; I certainly am willing to accept his conclusions as to the tube and the mode of using it.

DR. MOREAU R. BROWN: I think the tube shows a great deal of ingenuity on the part of DR. WAXHAM, and looks like something in the right direction. The tubes generally used are by no means perfect, and we are anxious for an improvement. This appears to be a great advancement on what we have already seen, and I shall look with interest for further reports from its use. I agree with DR. INGALS in his statement that the valve is not apt to catch much septic material, as it is very smooth in all its parts, and so well made that there is not much chance for anything to lodge on it.

DR. WAXHAM, in closing the discussion, said: The first speaker raised an objection to the tubes on account of the danger from septic

poisoning from collection of septic matter around the spring. It is always my custom, after using a tube, to soak it in 95 per cent. carbolic acid, and I am quite positive there would be no danger from sepsis after such a treatment. I think there is no danger from accumulation of mucus about the hinge.

In regard to deep tubing: I have passed through that experience, and I can see no advantage in that method over the high tubage. Indeed, during the early history of intubation, for a long time I used tubes with small heads, so small they would rest below the false vocal cords on the true vocal cords, and yet there was the same difficulty in swallowing liquids. DR. O'DWYER'S experience has been the same; he claims that a child will swallow food better with the larger heads than with the smaller ones first used.

These instruments were made for me by MR. TRUAX, and I think the instruments should be made only by the most reliable firms, and should be thoroughly inspected by an expert before they are sent out. I am about to suggest a further change: This wire is twisted about a pivot which controls the epiglottis. I shall suggest that an opening be drilled through the pivot and a wire passed through it instead of around it, and I think there will be still less risk of impairment of the spring. This, together with the gold spring, I think will overcome all difficulties.

DR. STOCKTON: I think DR. INGALS misunderstood me in regard to the head of this tube. I did not mean a smaller head, but thin from above downward, not laterally small.

CARBO-OXYGEN TREATMENT FOR CONSUMPTION AND OTHER FORMS OF WASTING DISEASE.

BY H. S. HUMPHREY, M. D., WHITE WATER, WISCONSIN.

When about a year ago, or possibly somewhat longer, I, in common with many other physicians, both in hospital and private practice, looked with sufficient favor upon M. BERGEON'S "consumption cure" to invest in an apparatus and give the method a trial, I thought at last a step in the right direction has been taken. But, like many others, I expected too much, and in consequence had many failures, and also a sufficient number of successful cases to stimulate further inquiry and research. Many doctors threw aside the practice owing to the bother and care necessary to the proper management of the apparatus, and more than all else, recorded failures because of careless preparation of the gases, overdosing, too great haste, improper hours for administration, and poor judgment in selecting cases.

I became much interested in the "new treatment," but soon learned it would not raise the dead. Neither was it applicable to every variety of ailment; but, like other therapeutic agents, I found it had its place, and that place was in the treatment of catarrhal affections, whether of the air-passages or of the digestive tract.

I never believed the gas had the power to destroy the bacilli of tuberculosis, neither did I lay any special stress upon their destruction, as I have never looked upon these as the usual accompaniment of suppurative action, feeling assured that they feed upon dead, and not living, tissue; hence to destroy them, the proper method would be to render their breeding grounds sterile and unfavorable for their support; and the shortest road to this I conceived to be: *Improve the nutrition of parts diseased*, and thus stop abnormal secretion. This I found BERGEON'S method able to accomplish in almost every case of catarrh; but in suppurative conditions of a tuberculous character, whose origin could be traced to malnutrition, through lack of power to assimilate fatty and other carbonaceous principles, I found M. BERGEON'S practice a failure in every case tried. Yet I was not discouraged. I felt there was a "balm in Gilead," and that these cases must be reached, if reached at all, "through the rectum," as experience had taught me the folly of attempting to feed such patients upon fatty matters, when a loathing of such food almost invariably exists, and if perchance the physician smuggles such principles beyond the disgusted palate, the stomach kindly passes them on to the intestinal tract. Through lack of pancreatic energy they cannot be emulsified, and hence are in every such condition ejected with the fecal matters.

In such cases the practice usually has been to feed the patient upon large quantities of albuminoid foods, peptonizing compounds, lean meats, fish, eggs, oysters, milk, etc., followed by large doses of pepsin; thus loading the alimentary canal with a mass of material which its weakened power could not assimilate, or its debilitated liver metabolize, and the effort becomes a detriment rather than a blessing.

In the feeding of sick people, proteid compounds are not favorites of mine, and when we reflect that a man weighing 154 pounds has in his composition but 4 pounds of nitrogen, while he has 97 pounds of oxygen and 48 pounds of carbon, we will at once see how foolish is the habit of stuffing the sick with elements rich in nitrogen, when as a matter of fact about all the real food they contain is the hydro carbon within them. But to utilize this a mighty struggle must ensue, not only to free the hydro-carbon from peptones but separate the nitrogen element (urea) and throw it out of the system by way of the kidneys, thus tasking a

torpid or diseased liver wholly beyond its power; and as it is well known, whatever of nitrogen is not converted into urea, in excess of the wants of the economy, is converted into lower compounds, as uric acid and other poisonous elements, the practitioner should be constantly guarded in ordering food rich in such elements; and it should always be borne in mind that the slightest particle of material taken into the system and left there unoxidized must be looked upon as a foreign element and frequently capable of generating diseased action.

I find the prime necessity of animal life, whether in health or disease, to be carbonaceous foods, thoroughly oxidized,—an easy problem in health, but a most difficult one in the various forms of wasting diseases under consideration.

Fully realizing the importance of these great forces, carbon and oxygen, in the animal economy, it occurred to me to place them in excess, where the natural forces of the system could not otherwise utilize them.

As a food I knew that cod-liver oil was the purest and best representative of the carbon group, and the greatest force (heat) producing agent known. One gramme (15.432 grains) when fully oxidized, as oxidation occurs within the body, will generate sufficient force to raise 27,778 lbs. one foot, requiring for each 100 parts of oil 293 parts of oxygen.—PAVY.

Thinking of this it occurred to me to digest (emulsify) the oil and introduce it well into the bowel beyond the internal sphincter. One ounce so placed will not only remain but be rapidly absorbed, and no traces of it could be found after an hour's time. After introducing the oil I allow my patient to rest for half an hour, then slowly inject from two to four pounds of pure oxygen gas, using it freely, well knowing from long experience, both by inhalation and injection per rectum, that its artificial assimilation is most difficult to obtain. Introduced into the bowel the gas is rapidly absorbed, and passing with the portal blood through the liver, it is soon thrown to the lungs from the heart. The carbon (oil) passing the epithelial frontier of the intestines, is taken up by the lymphatic system reaching the heart by way of the sup. vena cava and passing through the pulmonic capillaries, meets the oxygen and intimately combining therewith, these elements are thrown through the general circulation to every tissue of the body, furnishing thereto the chief elements of life, thought and activity.

To conclude: I have been using the above method now nearly four months. I am taking careful notes of all cases treated. I am greatly pleased with my success so far, and with your permission will furnish to the readers of your valuable journal about the first of November next a full report of my work for the year, which I hope may prove valuable to both doctors and patients.

Correspondence.

FREE-TRADE ON SURGICAL INSTRUMENTS.

I have read with much interest your observations on the above-named subject in the last number of the AGE, and while I do not find myself in possession of sufficient facts to warrant me in positively opposing your views, I must say that I very much hesitate in giving them a ready support on "a moment's thought." It seems to me that before asking for so ready a conclusion, we should be in possession of more information than you have seen fit to give.

Ought we not first to be informed as to the number of persons in this country engaged in the manufacture of such instruments, the wages paid to such artisans, and the wages paid to their competitors over the water? I think also that we should inquire into the progress made in this country during the last 25 years in regard to improvement in quality of goods, and also in the reduction of prices, which through competition has in many other departments worked out the best of all arguments in favor of a protective tariff.

If upon careful inquiry it appears, as in the case of quinine, that but a few dozen persons are employed in the manufacture and that no progress is being made, either in quality or in reduction of price through competition, then, of course, the question is easily settled, and "a moment's thought" is sufficient to lead up to the conclusion which seems to you as clearly established.

I am not astonished at our Southern friends reaching such a conclusion as did the Georgia State Medical Society, but there are quite a few persons in the North who, for some time to come, will continue to struggle on, and not look for the highest order of wisdom on such a subject to emanate from a region which always has been unable to supply itself with goods requiring a high order of skill in their production, but who are always ready to back a free-trade doctrine.

I hope in a few weeks to be in possession of some facts bearing upon this subject, and no matter which way they point, I will be glad to present them to your readers.

At present I ask the privilege of presenting a few "straws" which to my mind do not indicate any urgent necessity for rushing in the direction of free trade in surgical instruments.

I am credibly informed that surgical goods of a very inferior quality are shipped into this country, sometimes branded here, and put on

the market at a cheaper rate to compete with superior goods made here.

I believe that there is a prevailing belief in the minds of many persons, respecting the relative qualities of domestic and foreign goods, that is erroneous. Take soft-rubber goods, for instance, as the bougies and catheters. The French lead in reputation, but I know of many physicians who prefer a certain brand made in this country, and which now are sold at fifty cents, just one-half of what they sold for a few years ago.

I have seen a great many surgical instruments that were brought to Canada from England. I have had abundant opportunities time and again to purchase them, and would have had no trouble in bringing them in openly, free of duty. They are not so light or elegant in design and finish as our own. I have never brought any over, and I have never known any one who did, except in cases where they had previously owned them. On the other hand, the trade in surgical goods from this country to Canada steadily increases, so that to-day many Canadian physicians purchase nearly or quite all of such goods of us.

Possibly the Canadian doctors' estimate of Yankee instruments may be somewhat in keeping with the idea that "there is something about the water, or the atmosphere," that makes the "temper" of transatlantic instruments superior to ours.

A case of testing lenses, made in Paris, purchased of the largest optical house in this country, at 25 per cent. less than regular price, was found to be quite inferior to a case made here, which could have been bought from the manufacturer by the same party at a saving of 10 per cent.

I believe that $60 or $70 will go as far to-day in the purchase of surgical instruments as $100 would 15 years ago, and no one will deny that the instruments are much finer now, not only in temper but also in design and finish.

American microscope objectives of a certain make command the highest price, the world over, and are in great demand in Europe.

American watches are supplied to an English railway in India. American razors and pocket knives, are now considered by many good judges to be as good as any in the markets of the world. Have we any reason to doubt that in a reasonable length of time, under a properly fostering tariff, American surgical instruments will rank first in the markets of the world?

Though not born with a Yankee's birthright, I am glad to claim the honor of aiding and upholding his remarkable progress, and in this matter feel inclined to go rather slow lest I assist some one, whom I love less, to gain even a slight advantage over him.

Let our travelled friends speak up and tell us what they know about the quality and prices of instruments abroad. Possibly many of us obscure "bread-winners" do not know a really good trocar, knife, forceps or curette when we see it. If so, it certainly ought to do us good to be informed.

Let us have light, no matter whose eyes be dazzled by it, but I submit that it would be just as well to look a little around the woodpile, when a well-known, old time squall comes up from the land of Egypt. For, don't forget, my brethren, that the Britisher still keeps his weather eye on the "blarsted Yankee," and that said Britisher is not without his friends who remain under the stars and stripes, and who are ever ready to declare "Egad, 'pon my honah sah, don't yer see,—its just the thing, for its English you know"

W. R. MORDEN, M. D.

ADRIAN, MICHIGAN.

STATE MEDICINE AT THE MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

At the coming meeting of the American Medical Association at Cincinnati, Ohio, May 8, 9, 10 and 11, papers are expected before the Section on State Medicine, as follows:

First Session, Tuesday, May 8th, 1888.—1. Address by the Chairman of the Session, "Recent Advances in State Medicine." By HENRY B. BAKER, M. D., Lansing, Mich. 2. "Should the National Government Defend our Ports against the Invasion of the National Enemy, Contagious Disease?" By BENJAMIN LEE, M.D., Secretary of the State Board of Health, Philadelphia, Pa. 3. A paper (title not yet learned). By J. N. MCCORMACK, M.D., Secretary of the State Board of Health, Bowling Green, Ky. 4. "Cremation of Garbage." By J. BERRIEN LINDSLEY, M.D., Secretary of the State Board of Health. Nashville, Tenn. 5. "House Drainage." By JOSEPH EDWARDS, M.D., Philadelphia, Pa.

Second Session, Wednesday, May 9th, 1888.—1. Paper (title not yet learned). By E. O. SHAKESPEARE, M. D., Philadelphia, Pa. 2. "Personal Prophylaxis against Malarial Diseases." By GEO. H. ROHE, M. D., Baltimore, Md. 3. "Atmospheric Temperature and Intermittent Fever." By HENRY B. BAKER, M. D., Secretary of the State Board of Health, Lansing, Mich. 4. Abstract of Laveran's researches on the "Hæmatozoon of Malaria." By S. T. ARMSTRONG, M. D., U. S. Marine Hospital Service. 5. "The Internal Origin of Fevers." By J. A. LARRABEE, M. D., Louisville, Ky.

Third Session, Thursday, May 10th, 1888.—1. "Recent Discoveries and Researches with Regard to a Common Cause of Certain Infectious Diseases." By C. W. CHANCELLOR, M.D., Secretary of the State Board of Health, Baltimore, Md. 2. "The Causation of the Essential

Fevers." By PROF. VICTOR C. VAUGHAN, M.D., Ann Arbor, Mich. 3. "Hygiene of Infancy and Childhood." By T. B. GREENLEY, M.D., West Point, Ky. 4. "Eastern Carolina as a Residence for Tuberculous Patients." By JULIAN M. BAKER, M.D., Tarborough, N. C.

Each paper should take twenty minutes, and there should be discussion after each paper. If those who are to contribute papers see any error or omission in the title as here given, they will confer a favor by notifying the Secretary of the Section, S. T. ARMSTRONG, M.D., Marine Hospital Service, New York City, or the undersigned.

HENRY B. BAKER, M. D.,
Chairman of the Section on State Medicine, Am. Med. Association.

LANSING, MICH.

ANTISEPTIC MIDWIFERY.

I have been both amused and edified by the correspondence lately going on between the doctors on "antiseptic midwifery." DR. WARD'S article is the richest piece of irony, mellowed with sarcasm of the period, and is just such as ought to be meted out to all such artists as he refers to, who strain at a gnat, etc. All extremes are not only bad but ridiculous, and often mischievous. Every body understands DR. WARD'S meaning, and so does DR. CUPP, but he (CUPP) is a very pretty writer and the communication of Dr. W. gave him an opportunity to indulge in a little friendly criticism which if it will bring Dr. W. out in longer pieces than his last, will be appreciated. Not that we do not fully realize the importance of antiseptic midwifery, and antiseptic everything else, but "the happy medium" is the place for everything, even religion itself. When CERVANTES wrote Don Quixote he only intended to put a little check on Knight Errantry, but instead of reforming the ludicrous extremity to which it was carried, his book killed it. This has ever been the fate of everything, however useful, when carried to such an extent as to subject it to ridicule. So if DR. WARD does not entirely annihilate antisepsis, but only prevents us from becoming extremists, he will have done a good work. In all ages of the world, at least of the medical world, we find extremes in every department of our noble calling that bring us into ridicule among the laity, and we even reflect upon ourselves when in recalling past follies which a little common sense would have kept us from committing. No wise man wishes to become a Sangrado in physic or a Praise-God-bare-bones in religion, and when we achieve that enviable(?) position by emphasizing our cherished hobbies we become a laughing stock instead of exciting the admiration sought from the less informed.

W. B. TACKETT, M. D.

LAVACA, ARK.

LITHIA WATER.

Since the publication of my article, "A Study of the Therapy of Lithia Water," in the MEDICAL AGE of Oct. 10, 1887, I have received several interesting and pleasant letters on the subject. Among these has come an inquiry from an English practitioner, who writes asking:

"How large a percentage of lithium carbonate must a water contain to be truly characterized as a lithia water?"

This is certainly a relevant question in the matter of all mineral waters. Obtaining data by which to answer it, it has occurred to me that to collate the same may not be unprofitable by way of a supplementary word.

There are the waters of seven springs sold in our drug market, known as the Belmont, Buffalo, Capon, Farmville, Gettysburg and Wolf Trap, respectively. The constitutions range from a mere trace of the carbonate in the Capron water, to 13 grains to the gallon in the Londonderry water. In connection, DR. A. C. PEALE, chemist to the U. S. Geological Survey, says: "The Londonderry contains over 13 grains of lithium carbonate out of 30 grains of solids to the gallon. In others the amount is so small that the springs can be classified by some other ingredient." "The most noted of the European springs contain 4.01 per cent.,—a large percentage." There is a "wide gulf fixed" between 0.0055 and 13.37 per cent., and I wonder very much if we understand GARROD when he says, "A small amount of lithia is sufficient to form a salt with uric acid." There are doses and doses, percentages and percentages, the bolus and the parvule. But the infinitesimal in mineral waters,—is it homœopathic?

WILLARD H. MORSE, M. D.

WESTFIELD, N. J.

OLD PHYSIC.

In the MEDICAL AGE of February 25th, 1888, p. 87, is a note in reference to the praiseworthy efforts which are being made by the editor of the Medical and Surgical Reporter towards uniting all the sects and parties in medicine in one harmonious body. The writer of the note speaks of this undertaking as a laudable, but impracticable, one. I fully agree with him, for all such efforts are, indeed, "Love's Labor Lost." There is in reality but one sect, so to speak, in medicine, and that is Old Physic, and it is the best. It is the system of every age and of every nation, hence uni-

versal. It contains within itself all the truly valuable elements that are found in the different sects. It is, indeed, the everlasting mountain to which all sects and parties must ultimately go, for the mountain will never come to them. It is the only ark of safety for them. Although each one of the sects or systems may have more or less good in it, yet not one of them singly, nor all of them combined, would be able to fill the exalted position of Old Physic. Were the sects or parties in medicine really capable, by their single or combined efforts, to destroy the noble old structure, they could never replace it. I agree with the policy of the writer of the note to let them severely alone. Let them alone and they'll come home, leaving their shibboleths and isms behind them.

WILLIAM BODENHAMER, M. D.

NEW YORK.

A CASE OF MEASLES FOLLOWED BY MENINGITIS.

I was called on March the 5th, in consultation with DR. JOHNSON, to see Mrs. R., the mother of four children. She had measles the week before, which was followed by fever. The history of the case, as far as I could learn, was that she had been well "broken out," the eruption lasting the usual time, and although quite sick nothing special, denoting malignancy or any untoward sequelæ, had been observed. That morning, or sometime in the forenoon, she began to complain of violent pain in the occipital region, which was so agonizing that she soon became perfectly wild. When I arrived I found her with her hand spasmodically grasped upon the back of her head, calling alternately for hot and cold, and wanting "a hole cut into" her brain. She was perfectly cyanosed, and with the exception of a strong and regular pulse, was, to all appearances, moribund. She continued to sink, although her pulse remained good until but a short time before breathing ceased. I diagnosed it a case of meningitis.

This report is very unsatisfactory, but the best I can give from the imperfect history of the case I received. She had no convulsion or anything likely to have produced a rupture or an effusion on the brain.

W. B. TACKETT, M. D.

LAVAKA, ARK.

We have it on the authority of the editor of the Weekly Medical Review, that of all the twisting, burning, lancinating pains which afflict mankind, that accompanying the act of micturition in the acute stage of gonorrhœa is the worst. It must have been an unusually severe case. We are pleased to learn, however, that the injection of a drachm of a 4-per-cent. solution of cocaine shortly before urinating made the act painless.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., APR. 10, 1888.

Editorial.

SOME NEW THOUGHTS ON DYSPEPSIA.

The treatment of dyspepsia is not as satisfactory as could be wished, and the chief obstacle to success therein has been a lack of knowledge of the pathological conditions requiring correction. The term dyspepsia has been employed as a cloak to much ignorance, but of comparatively recent years an advance has been made in the fact that it is not regarded as expressive of any particular condition, but as a symptom of a variety of conditions, some of them extremely diverse in their nature, which obtain. It is especially desirable, in view of the prevalence of the conditions characterized by this symptom, and the suffering, both physical and mental, which they entail, that fuller knowledge of them become general. GERMAIN SEE, of Paris, in a recent paper read before the Academy of Medicine, and reproduced in the Medical and Surgical Reporter, has advanced views which, it would seem, should do much to this end. He argues that dyspepsia is always, and necessarily, a defective chemical process, due to some alteration of the elements of the gastric juice, and especially of the hydrochloric acid, and that the gastric juice may, moreover, be imperfect by reason of inertness of pepsin, or by reason of excess of peptones formed, or of mucus preformed, all of which retard digestion. This, he holds constitutes dyspepsia proper.

A second fact to which PROFESSOR SEE has endeavored to give prominence is that all the properties of the stomach which do not belong to the domain of chemistry, such as sensory and motor innervation, are simply auxiliaries to true digestion—may, in fact, undergo grave modifications without any real digestive trouble resulting. When gastric innervation is impaired, there ensues a series of perturbations which often simulate the phenomena of dyspepsia, and to such an extent as to render the distinction very difficult; but we have in these cases to do only with nervo-motor states, with atony or spasm of the stomach.

The chemical nature of dyspepsia being, then,

conceded it naturally follows that the exact condition can only be revealed through an examination of the secretions of the stomach. Formerly the means of securing a specimen of the gastric juice was through a wound or fistula of the organ, and for that reason only the juice secreted by inferior animals was available for examination. Now, however, the secretion of the human stomach is readily secured through the introduction of a soft-rubber tube, not much longer than a catheter, to which is attached an aspirator. The process is much facilitated by pressure over the stomach. The reagents which DR. SEE mentions for determining the nature of the acids present, and the excess or deficiency of each, are tropeoline, methyl violet, ferro-sulpho-cyanide of potassium, phenic perchloride of iron, phloroglucine-vanillin and Congo red. It will thus be seen that this method of diagnosis requires some knowledge of chemistry, rather more, perhaps, than is possessed by the general run of general practitioners. The difficulty may, however, be overcome by a little study or by calling in the services of one of the expert chemists who may now be conveniently reached in nearly every community.

1. Tropéoline, or Orange No. 4, first proposed by Van-der-Velpen, is a concentrated aqueous yellowish solution, which becomes bright red under the influence of the least trace of acids. 2. Methyl violet was introduced by LABORDE as a good test for lactic acid, which he considers the predominant acid in the stomach, being formed there, as well as hydrochloric acid. A few drops of this reagent, according to LABORDE, gives with the contents of the stomach, if lactic acid be there, a pale blue, becoming deep blue. 3. If the acidity of the stomach be from the acids of fermentation (such as sarcolactic acid), it is best recognized by ferro-sulpho-cyanide of potassium, which decolorizes the matters from the stomach. In a liquid form the stomach containing only two to four tenths per cent. of acids, especially of Hcl, the above reagents reveal the presence of the latter, while lactic acid only gives the coloration in considerable quantity. In the latter case, as well as when the acidity is due to fatty acids (butyric acid, etc.), the best test is the phenic perchloride of iron, which gives an ash-gray color.

Now we know, according to the researches of EWALD and BOAS, that during the first thirty minutes of digestion, lactic acid predominates, being formed prior to hydrochloric; then the two acids exist together (experiments of BERTHELOT and RICHET); then there is a phase exclusively hydrochloric, which begins sometimes after half an hour, sometimes after an hour. This applies only to healthy states; in certain morbid states the digestive periods, and especially the lactic phase, are greatly prolonged. The existence of these phases, which DR. SEE has called the *amylolytic period* and the *hydrochloric period*, brings confusion into our researches, for our reagents cannot enlighten us as to the relative proportion of mineral acids and organic acids. Here the recent discovery of GUNZBERG comes to our help, his phloroglucine-vanillin test constituting the surest and most expeditious reagent. GUNZBERG got the hint from WIESNER, who had observed that pine wood soaked in a solution of phloroglucine and moistened in strong hydrochloric acid, takes on a deep red color. Now the substance which with phloroglucine and Hcl gives the red stain, is vanillin. Two grammes (thirty grains) of phloroglucine, and one gramme (fifteen grains) of vanilline, with thirty grammes (nearly one oz.) of absolute alcohol, gives a reddish yellow solution. One drop of this solution in presence of even a trace of a concentrated mineral acid, takes on immediately a bright red hue, while at the same time beautiful red crystals are deposited. The organic acids, as lactic and acetic, give only negative results in presence of this reagent. If the proportion of the mineral acid present is very minute, it will be necessary to slowly evaporate the liquid in a porcelain crucible; you will then get a deposit around the edges of fine red crystals. For this purpose a spirit lamp should be used, care being taken that the liquid being tested does not boil. In testing gastric juice, take a few drops of the fresh liquid from the stomach, filter, and add as much of the phloroglucine vanillin solution; evaporate with the precautions mentioned, and the color reactions above described will occur. When the gastric liquid contains considerable quantities of albuminates or peptones, the isolated crystals are not observed, but the bright coloring persists, and the crucible is covered with a mixture composed of albuminates and fragments of crystals.

Instead of commencing the test at the end of fifteen minutes, and repeating it every quarter of an hour till four or five trials have been made (method of JAWORSKI and GLUZINSKI), a procedure which is very trying to the person under examination, DR. SEE practices the extraction of the juice at the end of forty-five or sixty minutes after a meal.

If now we apply these data to the divers diseases of the stomach, we shall see the pseudo-dyspepsias or nervous dyspepsias from a class apart from the chemical dyspepsias, properly so called. There are individuals who, with a normal proportion of Hcl in their gastric juice (0.15 to 0.2 per cent.), experience manifest digestive disorders—a sensation of pressure or of pain at the epigastrium, fullness after eating, gaseous eructations, capricious appetite, with absence of vomiting, regurgitations and emaciation. Chemical examination of the gastric

juice shows, besides hydrochloric acid, lactic acid, sometimes in normal, sometimes in abnormal quantity. Digestion is especially painful after the ingestion of food of a heavy, "hearty" character; while light food, and especially amylaceous food, gives little trouble. These are "nervous dyspepsias," cases of atony of the stomach, or simply gastro-intestinal neuroses. Now for the positive data:

First Group. *Anachlorhydric secretions.*—A first group comprehends the anachlorhydric secretions; a second group, hydrochloric excess; a third group, the variations. From recent researches the fact is brought to light that the diminution or absence of the gastric secretion is not as frequent as was formerly taught. Thus, even in fever, true acid gastric juice is not completely wanting. In reality, we may reduce to two the morbid affections which are attended with a minimum of hydrochloric acid in the gastric juice: 1, carcinoma of the stomach, with or without dilatation, and perhaps atrophy or amyloid degeneration of the organ; 2, certain dyspepsias called mucous dyspepsias, and especially those which result from marasmus, which constitute the most common kinds of dyspepsia.

Prof. See remarks that all authorities of late years—Riegel, Van der Velden, Ewald, etc., have testified to the absence of Hcl in cancer of the stomach. Riegel attributes this to a specific and destructive action of the cancer juice, and to concomitant mucous catarrh. The same absence (which is not, however, absolute) has been noticed in amyloid degenerations and atrophies of the stomach, and in sclerosis.

Mucous dyspepsias.—After carcinoma the morbid condition, which seems most to arrest the production of hydrochloric acid secretion, is mucous catarrh. It is certain that at the onset of the disease, hydrochloric acid is present; when later there are lesions of texture, as well as atrophy of the glands, and interstitial deposits, the acid secretion is no longer capable of demonstration.

Dyspepsias from inanition and marasmus.—It is certain also that the production of Hcl may be wanting in all cases of marasmus, as well as after grave hemorrhages, etc. This absence has been repeatedly noticed in tuberculous, uræmic, and diabetic dyspepsias.

Second Group. *Digestive troubles with hyper-secretion of gastric juice, or hyper-acidity.*—In 200 cases of dyspepsia, Boas noted this hyper-secretion in 60. The dyspepsia from excess of acid is quite different from that in which acid is deficient. The distress is intimately connected with the act of digestion, and does not begin immediately after the introduction of food, but after the end of half an hour, an hour, or even later. What these patients principally complain of is the highly acid regurgitations of food, belchings of sour gas which comes up into the throat and mouth, there are, withal, burning sensations along the œsophagus, and severe pains, often of a piercing character, sometimes referred to the pit of the stomach. The appetite is feeble or *nil*, the tongue heavily coated, the bowels constipated, and in an advance state of the disease, the patient is much emaciated. The analysis of the gastric secretions after a test meal shows that this train of symptoms depends on excess of hydrochloric acid production; it is not even rare to note 0.4 to 0.5 per cent. of Hcl present. The organic and volatile acids are more or less completely wanting. In this kind of dyspepsia the digestion of proteinaceous matters is well accomplished; it is even probable, considering the rapidity of peptonization, that the presence of peptones in excess hinders the rest of digestion. The digestion of starchy food is, however, impeded; for with more than one-tenth of one per cent. (0.1) of Hcl in the gastric juice, maltose ceases to be formed. If, in fact, we give to these patients an amylaceous mixture, and examine after an hour the filtered liquid from the stomach, we find plain evidence of *incomplete saccharification:* a solution of iodide reveals the presence of *erythro-dextrine*, while in the normal state we ought to find *achro-dextrine*, or even maltose.

Chlorhydric dyspepsia.—It is rare that the digestive disorders are any worse than those above described; but with excess of secretion the dyspepsia becomes chlorhydric; there is even sometimes a permanent hydrochloric-hypersecretion, so that in the morning when the stomach is empty, you will obtain by aspiration several drachms of liquid containing Hcl in abundance, and capable of digesting albumen. This form has been described by Reichman, Jaworsi and Riegel, who found in four cases of this kind, a marked dilatation of the stomach, resulting, doubtless, from prolongation of the digestive process.

Third Group. *Gastric juice secretions variable as to hydrochloric acid.*—This group includes dilatation of the stomach, of which so much has been said of late years. Dr. See is of opinion that this dilation is not a primordial disease of the stomach, but only a symptom more or less pronounced of divers affections of the stomach, or what is more frequently the case, of divers morbid states of the intestine. Moreover, the signs of gastro-ectasis are very uncertain, and in my experience are often referable to dilatation of the transverse colon. In doubtful cases, Ehrlich advises, in order to assure one's self that dilatation of the stomach exists, to give the patient salol in doses of fifteen or thirty grains. In the normal state this medicine passes intact from the stomach to the intestine, where it is mostly

broken up by the pancreatic juice, then absorbed and eliminated at the end of an hour by the urine; if the salol does not appear till much later in the urine, it is because the stomach is dilated and retains the medicament. DR. SEE has found four kinds of causes: 1. Fibrous or cancerous stenofis of the pylorus. 2. Atony of the gastric walls (through muscular enfeeblement). 3. Atony of the intestines, affecting the pylorus, and allowing gases to pass into and distend the stomach. 4. Intestinal dyspepsia —simple chronic (mucous membranous) enterocolitis, from which result gases by decomposition of the contents of the intestine, then pyloric insufficiency, and distention and dilatation of the stomach.

Bradypepsia.—There are cases which neither come under the category of chemical dyspepsia of the stomach, nor atony of the intestine, and which are characterized by simple retardation in the stomachal digestion; these are included under the head bradypepsia. We know, in fact, that the fragments of albumen in normal digestion appear, at the end of from thirty to sixty minutes, as if gnawed at their borders; we know that if the gastric juice if feebly acid, or neutral, or even alkaline (as is the case with the crustaceæ), the blocks of albumen remain unaltered till the moment when they pass the pylorus. This passage ordinarily takes place when the reaction of the gastric juice is at its maximum—then the larger part of the albuminous substances quit the stomach, and liquid extracted from the stomach at this time contains neither peptones nor acids.

DR. SEE gives some practical suggestions touching the treatment of dyspepsia, which we shall refer to in our next.

THE NIGHT SERVICE OF DRUG STORES.

The medical profession is seldom permitted to pass more than a week without some sort of a reminder that pharmacy is not a trade but a profession, and the suggestions are frequent and pointed that physicians should view it as such, and regard and receive pharmacists as brother professionals. It is, perhaps, an encouraging sign of the times that the old-time drug-clerk has just about become extinct. His place has been taken by the retail pharmacist, who, while deferential enough to the physician, and especially so to the one who sends prescriptions to his pharmacy, neglects not his opportunity to impress one with the fact that he has emerged from his chrysalis state of drug-clerk. In Michigan the fact that he can practice only under the authority of a thoroughly organized and, at present, a very competent board, certainly gives him the leverage on the physician and justifies his assumption of equality.

But this is only by the way. We are not stuck up and have no objection to pharmacy's being classed as a profession, or to recognizing its practitioners as something more than artisans. The point which we are somewhat tenacious on, is that with their advancement to professional being they ought to assume some of the obligations of the profession; that is, they should realize as a stern fact the altruistic nature of the profession. A profession is a profession, as distinct from a trade, through the fact that its practitioners are self-sacrificing and more intent on serving humanity than in feathering their own nests. This may strike some as a fiction, but if it be purely such the distinction between a profession and a trade vanishes. We want pharmacy to be a profession for this very reason, if for no other. Then we shall feel at liberty to ring the pharmacist's night-bell, and, succeeding in bringing him to attend to our wants, we shall not feel obliged humbly to beg his pardon for breaking in on his dreams. As things are now the physician who is out much o'nights has his patience very sorely tried by the treatment his patients receive at the drug stores. It is not an uncommon thing to be obliged to go to a half a dozen of these stores, before succeeding in getting a prescription filled. The young men who are in charge do not seem to fully realize their professional obligation to be at the beck and call of suffering humanity, and until they are willing to get up at the ring of the bell with the hearty responsiveness and alacrity which is so characteristic of the physician, we shall hesitate to give them a place in the ranks of the profession.

Notes.

We are obliged, after careful inquiry among Detroit doctors, to yield the palm to the Sacramento practitioner who made 100 visits and attended four confinements, besides attending to other business, in 24 hours. We have secured some pretty good stories, but none which quite equal this. Allowing this gentleman six hours for sleep, meals, etc., and he has 18 hours, or 1080 minutes in which to perform the work. His four confinements must have taken at least four hours, and he thus has 840 minutes left for his hundred visits, or an average of $8\frac{2}{5}$ minutes in which to drive to his patient, make his diagnosis and write his prescription. This analysis leaves him no time for the "other business" which he claims to have transacted. The glorious climate of California is productive of huge specimens of other things than trees and vegetables.

An illustration of the advertisement which may be secured through connection with a

hospital in the capacity of attending physician or surgeon, is furnished in the recent circular, for distribution to the public, by Harper Hospital of this city. The names of the staff are, of course, duly published, and to this there can be no exception taken, but when the trustees take occasion to state, as they do, that the list includes the leading physicians of the city, the statement is a little too invidious to meet with general professional sanction. Comparisons are said to be odious, and an institution which is so much dependent for its patronage on the profession as a whole, evinces questionable taste, to say the least, in thus proclaiming the superiority of its staff. The statement is quite gratuitous.

The Indiana Medical Journal must find it a comparatively easy matter to write, for it does not take time to ransack the dictionary for choice terms. The good old Anglosaxon and the vernacular answer its purpose. For instance it refers in one place to a certain "surgeon specialist" as a "he-prostitute and abortionist." In another place it holds up the editor of a certain popular health journal as "a quack, dead-beat, black-mailer, jail-bird and cunning scoundrel." They must be extreme cases to warrant such strong terms in their description, and it is but charitable to hope that our contemporary has been misled as to his estimate of these practitioners of medicine.

The Illinois State Board of Health which is generally supposed to have been just about perfectly framed as an engine against quackery, has recently had two tussles with the serpent and in each instance it has come out second best. The last was the case of two parties who operated a "medicine lodge" at Kirkwood. They took refuge in the emergency clause of the law, and the jury which sat in judgment on them disagreed. It requires more than a law to suppress quackery. As long as the element of gullibility exists in the human animal, quacks will do business.

Sir Morell Mackenzie still retains, the Emperor of Germany as his patient, and with such satisfaction to His Royal Highness that he has conferred on the Englishman the order of the Star of Hohenzollern. Whatever the outcome of the case may be, Sir Morell has by his great tact and dignified bearing, as well as by the skill which he has shown, quite conquered the German profession which was for a time insanely jealous of him. We hope the Emperor may recover for Sir Morell's sake, as well as for his own and Germany's sake.

A prominent physician of Kansas City asserts that a very considerable number of his co-practitioners do not realize more than $300 a year each, in cash, out of their practice. The Kansas City brothers are not peculiar in this regard. Sir Charles Clark, of London, worked twelve years for bread and twelve years for butter before he could afford any of the luxuries of life.

Our exchanges, generally, comment somewhat caustically on the fact that the Index Medicus has a subscription list of less than 400. It is certainly incredible that a work of this nature receives so little support, and Mr. Geo. S. Davis is entitled to great credit for his persistence in keeping it alive. It is certainly to be hoped that the profession will redeem itself in this matter before he gives the publication up.

Sir Morell Mackenzie's diagnosis of the Emperor Frederick's case remains unchanged. In his opinion the clinical symptoms are at first absolutely irreconcilable with the idea of malignant disease, and microscopical examinations support him in this opinion. The science of medicine, he holds, enables him to make no other diagnosis than a chronic inflammation of the larynx complicated with perichondritis.

The Deutsche Medizinal-Zeitung in referring to the discussion which has for some time been going on in this country touching the merit of the different varieties of the Rhamnus family, declares that while the R. Frangula, so long in use in Germany, is holding its own, it cannot be denied that the R. Purshiana (cascara sagrada) has some advantages, and that it is likely to come into use in that country.

The editors who shall attend the coming meeting of the Association of American Medical Editors at Cincinnati, are notified that they may not calculate on getting the customary food and drink on the occasion. Very weighty questions are to be discussed, and the stomach must not interfere. Like Sardanapalus, of old: the goblet we reserve for hours of ease; we war on water.

Dr. M. F. Cupp requests those who have read his reply to Dr. Ward, in the Age, to correct an error at the close, where "two-fold appreciation" should have read "two-fold application."

Virginia has made a long stride in the direction of medical reform. Her legislature has divorced the diploma-giving from the licensing power. May this leaven work through the whole Union.

The sum of $400,000 has been offered and refused for the London Lancet. Half that sum would purchase a large and complete assortment of medical journals in this country.

Medical Progress.

EXTRA-ROUTINE THERAPEUTICS. — "What shall I take for it?"—the question so frequently asked by patients—is the natural consequence and complement to the physician's routine advice to "take this three times a day," or however else it may be. The idea thus finding expression, that there is something to be "given," or something to be "taken," to remedy each of the various derangements of the human economy, we owe to it the vain and unscientific search for specifics, the popular fallacies concerning patent medicines, and the flourishing heresy of homœopathy.

"Therapeutics," as a study, is too often conceived to be identical with *materia medica*, and the one means of administering the charms contained in the pharmacopœia, is to have them swallowed. I do not desire to underrate the power of drugs, nor the convenience of administration by the mouth, but desire to give expression to the strong and growing conviction, that drugs are often employed unnecessarily, and that the stomach is thoughtlessly disturbed by irritant medicaments, when, by the exercise of a little ingenuity, it might be allowed to rest in peace.

What can be accomplished by regulation of diet, and by attention to the hygiene of daily life, as well as of the sick-room, does not need repetition here. There are, however, a number of therapeutic expedients, not fully appreciated on this side of the Atlantic, which may often avert the necessity of drugging; and to a few of these it is desired to call attention.

The subject of *lavage*, or *washing out the stomach*, has recently received an increasing degree of attention at the hands of American physicians, but resort to this procedure is by no means as general as it ought to be. According to DUJARDIN-BEAUMETZ, the method was originally proposed as far back as 1832, by a French physician, BLATIN, in the treatment of chronic gastritis; but it is to KUSSMAUL (1867) that we are principally indebted for a study of the indications and counter-indications and the details of the practice. KUSSMAUL employed a double stomach pump. OSER, of Vienna, and FAUCHÉ, of Paris, simplified the process by the introduction of siphonage, the latter communicating his procedure to the Academy of Medicine at Paris, in 1879. Various modifications have since been made by others. As now most usually performed, the operation consists in the introduction into the œsophagus of a flexible rubber tube, of material similar to the ordinary French catheter, with the extremity slightly stiffened, to which, by means of a short section of glass tubing and a yard or so of ordinary soft rubber tubing, a glass funnel is attached. The œsophageal tube is about 28 inches long, and there are three sizes, respectively, 8, 10, and 12 mm. in diameter. Before introduction it should be dipped into hot water or hot milk. Being sure it is in the œsophagus, and not the larynx, it may then be pushed by successive impulses into the stomach—the operation being greatly facilitated by efforts of deglutition upon the part of the patient. Some patients learn to introduce the tube for themselves with great facility. The funnel is then slightly elevated, and from a pint to a quart of warm water (say 100° F.), in which is dissolved a drachm or two of sodium bicarbonate or sodium borate, is slowly poured into the funnel. The funnel being of glass, and the glass junction tube before referred to, permit the passage of the fluid to be watched, and any obstruction or attempted regurgitation to be detected. The sensation of the patient will usually be a good guide as to the time when the stomach has been filled. In cases of distention very large quantities can be introduced. As the last portion of the liquid disappears from the funnel, it is rapidly inverted and lowered over a receptacle upon the floor, and the contents of the stomach are thus siphoned out. The process is repeated until the returned liquid is clear. During the introduction of the tube the first time, perhaps also the second or third time, there will be some dyspnœa, often nausea, occasionally retching, though rarely actual vomiting. The first can readily be overcome by insisting upon full inspirations, the latter disappear with tolerance. It may sometimes be necessary to prepare for the first few operations by full doses of bromides. The nausea usually disappears, however, even at first, immediately the water enters the stomach. Sometimes during the withdrawal of the solution, solid particles of food in the stomach become impacted in the eyes of the tube. This will be noticed by cessation of the outward flow. By allowing a little more water to enter the stomach they will usually be washed away, and the process may be continued. Sometimes the siphon may fail to work because the tube has been introduced too deeply, and is bent on itself within the stomach. This may be remedied by withdrawing a few inches. If necessary, the stomach may be manipulated, and efforts at coughing may be made by the patient.

While the simple solutions mentioned will usually answer all purposes, the method may be utilized for the introduction of various disinfectants and sedatives. Among those recommended are resorcin (one per cent.), boric acid (one per cent.), charcoal powder (two to four tablespoonfuls), bismuth subnitrate (two tablespoonfuls to the pint, "milk of bismuth"—Dujardin-Beaumetz), chloroform water (saturated), carbon disulphide water (one part of a solution containing 15 grains to the quart to two parts of water), creasote water (one per cent.), etc In the use of agents like resorcin, carbolic acid, creasote, the liability to absorption, if the solution is not all removed, must not be overlooked. In using bismuth, it is advised to wait a few minutes to allow the bismuth to be deposited upon the walls of the stomach, and then to withdraw the liquid.

Lavage should be performed when the stomach is practically empty, and for that reason many prefer the hour of rising in the morning. Late in the afternoon is sometimes more convenient. Generally one lavation daily is sufficient. After a while the intervals may be lengthened, until the process is finally discontinued.

The method is applicable in all cases in which a pronounced catarrhal condition of the gastric mucous membrane interferes with digestion or induces putrid fermentation of the contents of the stomach; in dilatation of the stomach; in some cases of gastralgia; in cancer of the stomach, as a palliative; and in the chronic gastritis of drunkards, even if there be some

hæmatemesis. In actual ulceration of the stomach it is, of course, contraindicated. The laudation of this method of treatment by competent authorities abroad and at home, conjoined with the fairly satisfactory results obtained in a limited personal experience, have convinced the writer that it is a valuable addition to our resources, and that the simple lavation with alkaline solutions will often be found much more efficacious than the routine prescriptions of pepsin, nux vomica and arsenic in the management of obstinate cases of dyspepsia.

Dujardin-Beaumetz advises that lavage be immediately followed by gavage with milk or milk and meat powder. Gavage, or forced feeding, is the utilization of the stomach-tube and funnel for the introduction of liquid food. As much as a quart at a time may often be introduced. Milk, previously peptonized if necessary, and of course warmed, is the basis of the nutritive mixtures employed. To this is added meat powders, eggs, farinaceous powders. It is especially applicable as a method of superalimentation in phthisis, but may be employed in other wasting diseases.

The value of electricity, of massage, of properly-selected gymnastic exercises, need not here be enlarged upon.

Forced respiration in phthisis may be accorded a few words. The well-known physiological and pathological conditions demanding the stimulation of intra-pulmonary circulation, especially through the apices, and the greatest possible normal dilatation of the pulmonary alveoli, do not demand discussion. Very manifestly, these desired results cannot be brought about by the administration of drugs; mechanical means must be resorted to. Various gymnastic manœuvres, Valsalva's and Müller's experiments, and other means requiring voluntary effort on the part of the patient, are of service. But voluntary forced respiration will not replace the more rapid and more effective method of artificial forced respiration furnished by the inhalation of compressed air, combined, if need be, with expiration into compressed air or into rarefied air. This measure may be carried out with so simple an apparatus as a hand ball or a bellows; but owing to the danger attending the use of unknown pressures in some instances, it is better to use an apparatus which enables the pressure to be controlled and regulated. That employed by the writer consists of a foot bellows connected with a small gasometer, and is fully as efficient as any of the more elaborate and expensive ones. The inhalations are administered once or twice daily. Air is inspired under a pressure of from $\frac{1}{80}$ to $\frac{1}{30}$ of an atmosphere; from ten to one hundred respirations being performed during five to twenty minutes, and the process being repeated after an interval of ten minutes. The good effects are due to dilatation of unused air cells, to removal of effete products with reopening of occluded air cells, to diminution of pulmonary congestion, to stimulation of intra-pulmonary and peripheral circulation, to increased oxidation of hæmoglobin with increased excretion of carbon dioxide, increased production of lymph, and increased absorption and tissue change—in a word, increased nutrition, with relief to local obstructive conditions.

After active treatment has ceased, the patient is instructed to keep what has been gained by daily exercises, such, for example, as standing before the open window and making one hundred (more or less) full inspirations (making the elbows touch behind the back as nearly as possible) and full expirations (placing each hand just back of the opposite shoulder) morning and evening; with proper advice, of course, as to ordinary respiration, open-air exercise, diet, etc.

Modifications of the pressure of the surrounding atmosphere, or of the air of respiration, *pneumato-therapy*, is available in the treatment of other affections than phthisis. Chronic bronchitis, asthma, emphysema, chronic pleurisy with effusion, chronic pneumonia, and dilatation of the heart may be cited. For use in cases more especially of asthma and chronic bronchitis, when the patient is able to make proper voluntary effort, and even it is hoped as a valuable means of respiratory gymnastics in the prevention of phthisis in predisposed subjects, the writer has recently had constructed by Messrs. Codman and Shurtleff, of Boston, a a pair of spring-valves, by which either inspiration or expiration, or both, may be performed against pressure. It gives the effect either of inhaling from a partial vacuum, or of exhaling into compressed air. The pressure may be accurately adjusted from $\frac{1}{30}$ of an atmosphere to any less figure. The apparatus is inexpensive and may be carried in the pocket.

In this connection, the method of inhalation in the administration of drugs for respiratory affections is suggested, both as a direct local benefit and as a relief to the stomach. Iodism, for example, may sometimes be induced by the inhalation of ethyl-iodide, when the ordinary preparations will not be tolerated. The inunction of iodine in lanolin (suggested to the writer in a consultation, by Prof. DaCosta in a case of pleuritic effusion) may also enable the stomachal administration of the iodides to be dispensed with.

Brief allusion to another simple mechanical expedient may conclude this hasty sketch—and that is, the use of water, or hydro therapy. Setting aside the benefit often obtained by the drinking of water (hot or cold), we may refer to the well-known expedients of checking hemorrhage by the use of hot water, and of reducing body heat by cold sponging, and, in the same way, the use of hot and cold water dressings in the treatment of sprains, as examples of the good results to be obtained by the judicious use of water as an external application.

While, however, these procedures, and, of course, the familiar poultice, almost exhaust the list of hydro-therapeutic applications in common use, they by no means exhaust the possibilities of the agent, which has been too long left in the hands of irregular and half-educated practitioners.

In the use of hot or cold applications, local or general, we possess potent means of influencing temperature, circulation and tissue changes; reducing inflammation and promoting the elimination of effete and noxious, often toxic materials.

The enema might be added to the list of hydro-therapeutic measures in common use, but *systematic irrigation of the large intestine* has not yet won general favor. It is applicable in the treatment of habitual constipation and the so-called bilious state, in which retention and accumulation of fecal masses is so common an occurrence, though not commonly recog-

nized. Until this condition has been overcome, the most judicious medication will not be efficacious. Even when patients speak of "regular stools daily," or complain of occasional diarrhœa, it will often be found that the matters voided have trickled between the interstices, so to speak, of long pent-up masses. Neither purges nor simple clysters will remedy this state of affairs. The rectal tube should be inserted well into the bowel (six to eighteen inches), the patient placed on knees and elbows, and about a quart of water, slightly alkalinized and warmed to about 100° F., slowly introduced by means of a fountain syringe, with interposed hand ball. The patient is then put to bed, warm cloths laid upon the abdomen, a dose of some mild laxative (Castor oil) administered, and at the proper time another irrigation brings away the impacted masses. Once may suffice, but the process, modified to the circumstances, will usually have to be repeated. After fecal retention has been overcome, enemas of small quantities of cold water introduced merely into the rectum, may from time to time be employed to stimulate peristalsis.

The *water-bed* of HEBRA is a valuable instrument in the treatment of extensive burns, and other painful or neurotic affections involving the cutaneous surface.

The cold bath, or wet pack, is an efficient antipyretic, and, if used with the same judgment and discrimination as any other powerful measure, capable of doing much that cannot be done even with the most recent products of the laboratory. This subject, however, cannot be elaborated in the few lines yet at our disposal.

In conclusion, we would repeat, that while the administration of drugs is a necessary and powerful means of therapeusis, intelligently employed, yet they may often be omitted without harm; while much can be done by the mechanical means here indicated, and by others not alluded to which cannot be accomplished by any agents known to the dispensatories.—SOLOMON SOLIS-COHEN, A. M., M. D., in *Polyclinic*, Sept., 1887.

GERMICIDES IN THE INTERNAL TREATMENT OF DISEASE.—That the ubiquitous microbe is a most important factor in pathogenic processes is no longer moot in the institutes of medicine.

Modern surgery, under the leadership of Lister, has built upon this foundation a magnificent superstructure which will not crumble under the touch of destructive criticism, nor totter to its fall amid the upheavals of original research. And quite naturally has arisen the question: How far can the germicidal drugs, so easy of application, and so potent for good under the surgeon's hand, be made to do service in the internal treatment of zymotic diseases?

It can not be said that the physician has been less industrious than the surgeon in the use of tentative measures to this end; but it can not be denied that difficulties, physical, physiological, and chemical, have proved such hindrances to progress that, while the surgeon now quaffs an aseptic atmosphere amid the ineffable glories of the Delectable Mountains, the physician is still wearily breathing the germ-laden air of the Slough of Despond.

Aside from a few time-honored achievements empirically reached, and only long afterward given scientific dignity by the discovery of a specific germ in the disease against which they were employed (mercury in syphilis, quinia in malaria, salicylic acid in rheumatism (?), ferric chloride in erysipelas, etc.), ground can hardly be said to be more than broken in what promises to be a field for the reaping of an abundant harvest.

Perhaps the most marked approach to the desired end is to be found in the promptness with which quinia, salicylic acid, salol, acetanilide, antipyrine, and some other members of the antiseptic group reduce fever. There is scarcely room for doubt that the *methodus medendi* of these drugs is to check, by rendering them temporarily inactive, the proliferation of the microbes, of which the pyrexia is the systemic expression; but here, except in the fever of malaria, and possibly that of rheumatism, the measure is palliative rather than curative. In a certain sense, however, the antipyretics, in typhoid, typhus, the Oriental plague, variola, measles, scarlatina, and other septicemic fevers may be said to be curative, and if so, it is by virtue of the fact that, by holding the microbes in check, they permit the blood to reinforce itself with a new army of leucocytes which (the old one having been worsted by contest with overwhelming numbers) heighten the nutritive functions of the economy, and wage afresh the internecine warfare with the destructive germs. Furthermore, in the sweating which accompanies the defervescence, myriads of germs are driven out of the blood through the sudori-parous ducts to return no more.

Thus the patient is given vantage ground, and his chances of weathering the storm are measurably increased. It may be objected that this discussion is, as yet, only hypothetical; but it can not be denied that the microbes are a fixed fact in the pathogenesis of the diseases in question, standing "either in causative relation to the morbid process, or are necessary to its evolution and development." There is also abundant authoritative testimony to the therapeutic efficacy of these drugs in the management of these fevers, and this theory of their action not only saves the physician from the onus of empiricism in their use, but opens up a field for study that bids fair to place it upon a firm scientific basis. A careful microscopic study of the blood of the fever patient previous to the pyrexia, during the pyrexia, and during the stage of defervescence, when the antipyretic is doing its work, and of the perspiration at different times during the sweating stage, will test the hypothesis to the full and put us in possession of facts of the greatest practical value.

Some clever work in this direction has already been done; but the importance of the subject demands that it be submitted to the most searching scientific study. Apropos of this discussion in a paper by Dr. A. H. Newth, in the Lancet of February 18th, in which it is proposed to treat hydrophobia prophylactically, and when the disease is on, by frequently-repeated doses of the hyposulphites of sodium and magnesium. "Nearly thirty years ago Prof. Polli, of Milan, suggested the use of sul-

phurous acid in cases of icorrhemia. He proved, by experiment, that dogs which had putrid blood injected into their veins quickly died; but if hyposulphite of sodium was previously mixed with the blood they were not affected. Further, if hyposulphite of sodium was administered, either before or immediately after the injection of putrid blood, they did not suffer."

The author claims to have used the remedy repeatedly in cases of blood-poisoning, with marked success, stating that the symptoms abate in a very short time after the exhibition of the drug. He says:

"During a post-mortem examination I accidently punctured my hand; shortly after a red spot appeared on the site of the injury, which enlarged and became very painful, my hand and arm swelled, and I felt very ill. I examined some of the serum from the pustule under the microscope, and found it teeming with micrococci and bacteria in rapid motion. After taking several doses of hyposulphite the pain almost ceased and the microbes were seen to be perfectly motionless. The swelling soon subsided, and I experienced no ill effects, though the pustule took some time longer to heal."

The author prescribes the hyposulphites in all cases presenting symptoms of blood-poisoning, and in aphthæ, boils, and scrofulous abscesses, where "it really appears to do great good." He has also employed it with success in diphtheria and puerperal fever. Thus encouraged, he continues:

"It seems to me that, as hydrophobia is without doubt a form of septicemia, the hyposulphites might do good in this terrible disease.

"After a bite by a mad dog, I would give five or ten grains of the hyposulphite of sodium or magnesium (the latter is richer in sulphurous acid) for the first three or four days every three or four hours, then three times a day for a week, then twice a day for another week, then every morning early for one month, recommending a Turkish bath twice a week. When the disease has developed I would prescribe the hyposulphite every hour, or every two hours, with vapor or dry hot-air baths, or prolonged warm-water baths containing some hyposulphite in solution. The hypodermic injection might be tried if the patient is unable to swallow."

To those who have used the hyposulphites with negative results, in season and out of season, any time during the last twenty years, the seemingly utopian proposition of our English friend will provoke a smile, but it can not be denied that his observation relative to active and quiescent microbes is in harmony with the spirit of the times, pertinent to the question under discussion, and should encourage in his professional brethren liberal research along similar lines.—*News and Practitioner.*

THE FEEDING OF SICK CHILDREN.—PROF. JACOBI, of New York, contributes to the Archives of Pediatrics, Vol. V., No. 1, a very exhaustive article. He points out that from the very first month of life a distinct diastatic effect is produced by the oral secretion and that it increases every month. Moreover, this effect persists in the stomach for from half an hour to two hours; but it ceases altogether as soon as hydrochloric acid has begun to be secreted. Lactic or other organic acid alone is secreted with the pepsin in the stomach for the first half hour or more, and in debilitated subjects for the greater part or the whole of the digestive period. The diastatic power of the pancreas begins with the fourth week only and remains feeble up to the end of the first year.

To increase the secretion of pepsin and hydrochloric acid, which are deficient in anæmia, convalescence, and more particularly in fevers, large quantities of water are required, and peptones are not absorbed unless greatly diluted. Therefore, not only should infant's food be mixed plentifully with water, but water should be given alone, occasionally, more especially in the summer time. Water is indicated in diarrhœa, general inanition, perspiration, and feverish diseases; where it is not retained, enemata should be employed. Further, where metamorphosis is slow, water increases the elimination of urea and carbonic acid; when the urine is concentrated, water protects the kidneys from undue irritation; it liquefies the mucus in laryngitis and bronchitis, and removes the dryness of the bowels in constipation.

On the other hand, in some forms of acute gastro-enteritis, where vomiting and diarrhœa are excessive, the only salvation lies in total abstinence for from four to ten hours. Sugar must be added to an infant's food because human milk contains a larger proportion than that of either cow or ass; but cane sugar is preferable to milk sugar, because it is much less rapidly converted into lactic acid.

Milk should never be given to well or sick without the addition of table salt. This, amongst other things, prevents the solid coagulation of milk. Fatty substances must be given with caution. The white specks in babies' motions are nearly always composed of fat and epithelium, and the administration of cream or cod-liver oil is very injurious to such cases.

The mixed milk of a dairy is preferable to that of one cow; it must be boiled before being used. Condensed milk is not uniform, and its use for that and other reasons is precarious. Goat's milk contains too much casein and fat besides being otherwise incongruous. Skimmed milk, prepared in the usual slow way, is objectionable, because acid. No infant's food should contain more than one per cent. of casein. The best way to dilute cow's milk and, at the same time, render it less liable to coagulate in large lumps, is to add a decoction of a cereal; barley, when there is a tendency to diarrhœa; oatmeal, when the tendency is to constipation. The newly-born should have boiled milk (sugared and salted) mixed with four or five times its quantity of whole-barley water; at the age of six months, they should be of equal parts. Gum arabic and gelatin may be used in a similar manner. These are not only diluents, but under the influence of hydrochloric acid, nutrients. Beef-tea, or, when there is diarrhœa, mutton broth, is advisable towards the end of the first year or much earlier than this in rickets, undue adiposity, and retarded teething. Peptonized beef-tea, such as Rudisch's, may be mixed with broth. Scraped beef is easily digested, but is open to the objection that tænia medio-canellata may

be caused by it. The white of an egg beaten up with six ounces of water and a little salt, is a good temporary expedient. Cow's milk is rendered more digestible for those infants or adults who cannot tolerate it in its ordinary condition, by mixing half a teaspoonful of dilute hydrochloric acid with a pint of water and a quart of milk and then boiling it.

Alcohol is contra-indicated in meningitis, acute cardiac ailments, gastro-enteritis, peritonitis, and acute dysentery. It is stimulant, nutritive, antipyretic, and antiseptic. The amount necessary to reduce the temperature is that comprised in about three ounces of whisky or brandy. It must always be diluted either with water or with properly prepared milk. "Whoever is not afraid of giving six ounces of whisky daily to a child when one or two fail, or ten or twelve when six fail, will soon convince himself of its power for good." Whisky is, as a rule, preferable to other stimulants; the ether of wines neutralizes the antipyretic effect of the alcohol, and the fusel-oil its stimulating action.

NITRO-GLYCERIN IN EPILEPSY. — Naturally enough, when the remarkable action of the nitrites on unstriped muscle was discovered their use was suggested in epilepsy, a disease believed to be due to arterial spasm in the hemispheres. Nitrite of amyl, nitro-glycerin, and nitrite of sodium have been carefully tried by many observers with very varied results. DR. WEIR MITCHELL and DR. HAMMOND, were, I believe, the first to employ nitro-glycerin in this disease, and they have reported beneficial effects in suitable cases. I was induced to try it by the very favorable results reported by DR. F. W. CAMPBELL, of Montreal. I have used it in 19 cases. It may be administered in solution, one-per-cent., or in pilules of 1-100 of a grain; and I find the latter, as prepared by reliable chemists, very satisfactory. I begin with giving it two three times a day. As individuals appear to differ in their susceptibility to this drug, each case must be tested before the proper dosage can be determined. I doubt if any good follows unless the physiological effect is obtained. Sensations of flushing of the face, fullness of the head, and a pleasant glow over the body, indicate that the proper dose has been reached. In some patients these symptoms are produced by one or two pilules, but in others not until six or eight have been taken. Headache and dizziness were the only unpleasant symptoms complained of, and on this account, in two instances, the medicine had to be stopped. I have notes of 19 cases in which the nitro-glycerin was tried for periods ranging from six weeks to six months. In 13 of these cases there were severe epileptic seizures, six mere instances of *petit mal* with occasional convulsions. Briefly stated, in nine cases there was improvement, as shown in the reduction of the frequency of the attacks. Of these, six were cases of major epilepsy; and three, instances of *petit mal*. The benefit was usually manifested within a week or ten days. Thus case 16, a man aged 27, had had fits for ten years, and when seen, April 5th, had as many as two or three a day. He had taken potassium bromide largely, and at one time with great benefit. Antifebrine was given, in gr. viii, two or three times a day, but seemed to be without any influence. On June 1st, nitro-glycerin was given, ℥v of the one-per-cent. solution, three times a day. Within a week the attacks were preatly lessened, and in the second week after beginning he had only two attacks. He continued to take it all through the summer, getting up to ℥viii—doses, t. i. d. He does not think that anything he has ever taken reduced the fits so much. On November 11th, he stated that he had stopped it for a month; the attacks have recurred less frequently, and he had been able to be at work.

In some of the cases in which the betterment was most striking at first, the remedy seemed to lose its influece, and after a month or two had to be abandoned. I cannot say that in any one of the nine cases the improvement has been more than temporary. In two of the cases of *petit mal* the attacks were greatly reduced, and one patient remained free for two months, but I learn by letter that the attacks have returned. Altogether my experience has not been very encouraging. We may say that, in a limited number of cases, when the bromides have failed or are beginning to lose efficacy, nitro-glycerin may be used with advantage. I have also used the nitrite of sodium in a few cases with indifferent success.—WILLIAM OSLER, M. D., in the *Journal of Nervous and Mental Diseases.*

SYSTEMATIZED ACTIVE EXERCISES IN NERVOUS AND MENTAL DISEASES.—DR. CHARLES K. MILLS, in a paper read before the Philadelphia County Medical Society, has called attention to the value of systematized active exercises in the treatment of nervous and mental diseases. He alluded to the value of the writings of the Drs. Taylor, of New York, Drs. Benjamin Lee, Dujardin-Beaumetz and Schreiber, in regard to general medical gymnastics, and to Mr. Blaikie's two well-known books on physical culture to preserve health. Mills has found properly guarded-gymnastic exercise of valve in neurasthenia, hysteria, habit-chorea, neuritis, lateral spinal curvature, melancholia, idiocy, insanity, asthma, minor chorea, general nervousness, lithæmia, diabetes, ataxia, paralysis, atrophy, aphasia and writer's or telegrapher's disease.

Of its use for the insane he says: "I believe insanity affords a great field for such treatment. In the first place, such exercises will do much toward improving the frequently deteriorated physical condition of the insane; secondly, they afford a method of calling out and improving the impaired mental faculties; and, thirdly, they constitute another valuable means of supplying to the insane that which all alienists now agree is most important to them —occupation. By means of systematized exercises, the insane can be provided with an additional 'rational physiological outlet' for their morbid muscular energy, on the one hand, and, on the other, with a rational physiological method of calling them out of their muscular and general torpor. In the Insane Department of the Philadelphia Hospital, even patients in the profoundest depression, could, by sufficient persistence, be aroused to the performance of some movements; others did moderately well; some very well. The difficulty of fixing the attention of these patients, and yet

the possibility of doing it by sufficient effort has been clearly shown."

In the idiot schools, under Dr. Kerlin in Pennsylvania, and Dr. Brown in this state, regular gymnastics have been of the greatest value; and at the insane asylum in Dixmont, Dr. Mills might have found an admirable illustration, if the daily gymnastic drill of ten years ago had been kept up, for the benefit to the patients was then very manifest.

It is impossible to follow all the details of this excellent paper, but it is all comprehended if one says that all people need exercise or some substitute for it, and the ill even more than the well. Dr. Mills recommends the complicated apparatus of Ruebsam, and the simple pulling weights of Reach & Dowd. In Boston, excellent pulleys and weights are sold at the low cost of four and six dollars, which have proved invaluable to many invalids and delicate people. In neuralgia, muscular rheumatism, constipation and the host of symptoms associated with what is known as poor health, as well as in more serious troubles, judiciously used under the general direction of a physician, these simple measures have often been of great service.—*Boston Med. and Surg. Journal.*

THE ABUSE OF ELECTRICITY.—The importance of electrical therapeutics is meeting now, after long delay, with proper recognition from our medical colleges. No student is graduated to-day without some knowledge of this branch of medicine, though few acquire it to the degree of proficiency. This is, perhaps, more the fault of the student than the instructor. Electro-therapeutics seem to be so simple, when considered superficially (which is the way they are considered by most medical tyros), that very little time is given to the study of the subject. Many fancy that there is nothing to be done but start the current and apply the electrodes; that electricity can't do any harm if it don't do any good, and that its systematic application is mere ceremony. It is this lack of knowledge that begets lack of faith, both in the patient and operator. The careless use of the battery, the ignorant application of galvanic and faradaic currents *ad libitum*, not only fails signally, but may produce genuinely deleterious effects. It is a great misfortune that the advertising of electricity as a cure all has thrown discredit on electro-therapeutics, which have been branded, therefore, to some extent as a sort of quackery. This is even more so with magnetism. Very often we find people opposed to the use of electricity. They have tried it, they say and it has done them no good. Investigation generally shows that such patients have worn some of the so-called electrical apparatus or clothing, have used electric hair-brushes, or worn "Voltaic medals," which, of course, have nothing to do with electricity, and are not of as much use as a liver-pad. Occasionally we come across some who have really tried a battery, but it has, perhaps, been the wrong current, applied too strong or too weak, and generally in the wrong place altogether. It is a great pity that it is possible for people to trifle with such a valuable therapeutic agent as electricity, which is often brought by pure ignorance into undeserved disrepute. But it is not only the unprofessional experimenters who err in this way. Many older and less progressive practitioners who hear the merits of electricity noised abroad, invoke its agency without understanding properly the mode or theory of its application. They had not, as students, any opportunity of studying electro-therapeutics, then in its infancy; and latterly, as physicians, they have not appreciated the importance of the subject sufficient to give it due attention. It is in this way that the usefulness of a great remedial agent is hindered and prevented.—*Medical Register.*

TURPENTINE IN DIPHTHERIA.—We have, on several occasions, referred to the use of turpentine in diphtheria. Recommended originally in Germany, and claimed to be almost a specific, it was there, also, that the employment of the drug was subjected to the most severe criticism. Some recent publications have again drawn attention to the alleged value of this substance, and most remarkable among these is an article by DR. ROESE, which appeared in the Therapeutische Monatshefte. The author asserts that he has employed turpentine in diphtheria for the past four years. In that time he lost only five cases out of sixty that came under treatment. Two of the fatal cases concerned infants one year old, who appeared moribund when first seen, and died a few hours later. The other fatal cases were also unusually severe from the start, two dying in thirty-six hours, and one surviving five days. This is certainly a noteworthy record, as diphtheria statistics go.

The oil of turpentine was administered in drachm-doses, three times a day. Sweet spirits of nitre was used as a corrective, in the proportion of one part of the spirits to fifteen of the turpentine. Symptoms of intoxication were never observed by the author. In addition to the turpentine, a two per-cent. solution of sodium salicylate was given every two hours, in tablespoonful doses. A gargle of chlorate of potash solution was likewise employed whenever possible. Under this plan of treatment rapid amelioration of local signs and constitutional symptoms were observed. Usually improvement began at once, and it was rarely necessary to push the drug beyond five or eight doses. It should be remarked in this connection, however, that a very generous and stimulating fluid diet (strong broth, port wine, milk, etc.) formed a feature of DR. ROESE'S plan of treatment.

Those who are inclined to be sceptical with regard to the utility of medicines in the severer forms of diphtheria (and the profession contains many such) will scarcely accept the author's figures without challenge. On the other hand, for the very reason that violent diphtheria ordinarily justifies so gloomy a prognosis, we are ever ready to employ any means at our command which may possibly reduce its frightful mortality. There is no reason, therefore, why the turpentine treatment of this disease should not be given a fair trial.—*Med. Record*, Feb. 4, 1888.

THE TREATMENT OF SLEEPLESSNESS.—DR. ECCLES, in the Practitioner for March, 1888, concludes an interesting article on the treatment of insomnia as follows

The hot bath, the hot abdominal compress, with or without previous kneading of the belly, or the whole wet-pack modified to suit the requirements of the case, and all of these followed by the most rigid observance of the recumbent position in a warm bed placed in a quiet, cool, well-ventilated room, so arranged that direct or reflected light, whether from fire or candle, shall not disturb the patient, have been found almost invariably successful aids to sleep in the different disorders of this function not dependent on pyrexial or severely painful conditions which have come under the notice of the writer. And even in cases of severe sciatic and trigeminal neuralgias the wet-pack has been employed with good results; but for the various derangements of sleep included under the general term insomnia, these expedients are only temporarily useful, to initiate, as it were, the permanent restoration of the rythmical healthy repose of mind and body of which those for whom they have been employed stood in so great need.

To effect this permanent restoration of refreshing sleep a method of treatment is needed which must break the chain of vicious circumstances under whose thraldom the patient has lost the power to sleep. The brain in these cases often found to be overworked, must be allowed to lie fallow as far as possible; the stomach, which has generally suffered with the other organs of digestion from the most extraordinary maltreatment, must be coaxed back again to a regular performance of its duties; while the muscular system, which has become wasted and inert from long disuse, must be called upon to fulfil its digestive and excrementitious functions, so long left in abeyance. Under the combined influence of the recumbent position in a quiet room, away from the cares of domestic, social, or business life, carefully modified diet, and massage applied as a therapeutical agent, not without regard to the mode, duration and extent of its administration, the methods of treatment referred to above may be carried out with the happiest result in the majority of cases.

Antiseptic Lozenges in Lung Diseases.—Dr. Durant describes the effect of Dr. Albin Meunier's antiseptic lozenges in the treatment of pulmonary tuberculosis and other affections of the respiratory organs. The discovery of the pathogenic microbe of these affections suggested that they might be completely cured if an efficient agent could be found to destroy the microbe, or render the organism impervious to its attacks. The antiseptic treatment of affections of the respiratory organs was a method in accordance with the most scientific theories; its practical application was, however, rendered almost impossible for the following reason: It would only prove effectual if the antiseptic remedies were administered in large quantities; these in strong doses exercised an injurious and even dangerous action upon the cells of the organism. Dr. Albin Meunier has discovered a means by which antiseptic remedies which destroy the pathogenic microbe of pulmonary phthisis and other broncho-pulmonary affections may be administered in active doses without any danger whatever to the organism. Dr. Meunier's antiseptic lozenges are composed of carbolic acid, eucalyptol, iodoform, creasote, menthol, etc.; 1 to 3 lozenges are given at each meal. The beneficial effects of volatile essences in the treatment of broncho-pulmonary affections have been demonstrated by numerous observations. They arrest the evolution of the bacillus, modify the character of the secretions, and diminish the fits of coughing. Dr. Meunier's lozenges are rapidly absorbed, and the organism is quickly and thoroughly impregnated with the antiseptic substances. Their odor is observed in the breath, in the urine and perspiration of the patient shortly after the lozenges have been swallowed. Owing to the purity of the substances employed, this treatment never disturbs the digestion. The action is prompt and effectual; tonics and strengthening medicines may be combined with this treatment. Under it the patients increase in weight, diarrhœa and night-sweats disappear, and the local symptoms are modified.—*L'Union Médicale*, Dec. 11, 1887—*Jour. Amer. Med. Assoc'n*, Feb. 4, 1888.

Convenient Combinations for Administering Hydrochloric Acid in Dyspepsia.—The Revue Générale de Clinique et de Thérapeutique of February 9, 1888, contains a number of formulæ for the administration of hydrochloric acid, from which we take the following:

Hydrochloric acid lemonade:

Aquæ, O1¾.
Syrup. simpl., ʒ 25.
Acid. hydrochlor., ♏30 to 60.
Spirit. limonis, ♏15.

A half glass or glass after meals.

A digestive and laxative potion may be ordered as follows:

Acid. hydrochloric, ♏15.
Syrup. simpl., ʒ 8½.
Vini rhei, ʒ 25.

Of which the dose may be varied as indications demand.

Hydrochloric acid and cocaine may be given as follows:

Syrup. menth. piper., ʒ 7¾.
Acid. hydrochloric., ♏15.
Cocain. hydrochlorat., gr. 1½.

Which is prescribed by Huchard in varying doses for gastric pain in eating.

West prescribed for children the following mixture, in doses of one to two teaspoonfuls:

Acid. hydrochloric. dil., ♏15.
Syrup. aurant. cortic., ♏85.
Tinct. aurant. amari, ♏45.
Infusion. cascarillæ, ʒ 10.

Hydrochloric acid is given to increase the acidity of the gastric juice; to dissolve phosphates and alkalies; to contribute to the formation of chloride of sodium in the organism. In general terms, it is given before meals to assist in overcoming gastric atony; after meals to remedy hyper-alkalescence.—*Medical News*, March 27, 1888.

METHYLAL IN DELIRIUM TREMENS.—An interesting note on the value of methylal, the new hypnotic, has been contributed to the Therapeutische Monatshefte (February) by PROFESSOR V. KRAFFT-EBING, of Grax. Acting on the advice of MERCK, the well-known pharmacist, he employed an aqueous solution of the strength of 1 in 10 as a hypodermic injection; each injection contained 0.1 gramme of methylal, and in this strength produced only slight and transient smarting. Thus administered it was found that the drug only produced its effect after an interval of about two hours; if sleep was not produced after between two and three hours, the injection was repeated. Twenty-one persons were thus treated, about half the number being slight cases; in 6 instances sleep was induced by 1 injection, in 10 by from 2 to 4, in 3 by from 5 to 8, and in 2 by from 10 to 20; deep, physiological, refreshing sleep, which sometimes lasted 20 hours, was then obtained; in other cases, the patient slept for two or three hours to wake again delirious, but the treatment being persevered with, the prolonged so called critical sleep always ensued. PROFFESSOR V. KRAFFT-EBING considers methylal to be the best sedative and hypnotic in delirium tremens which he has ever used; it has no depressing action on the heart, but rather the contrary, and it is followed by no unpleasant after-effects. He considers that it is likely to be useful in insomnia and restlessness due to inanition or cerebral anæmia, but that it is contra-indicated in cases where there is cerebral hyperæmia. The very small doses which were found to be adequate give special importance to this communication.—*British Medical Journal*, March 3, 1888.

ELIXIR PARALDEHYDE is the coming remedy as a substitute for opiates and other anodynes, according to Dr. A. B. Cook, of Louisville, Ky. (Progress). Brought to notice in 1883, it is a chemical composition of $C_6 H_{12} O_3$. Has an ethereal taste and odor, is pungent and disagreeable to the taste, but as an elixir it is not specially unpleasant, and judging from its effects is a solace to the patient. It is claimed to be a safe remedy—"no danger of active or passive congestion of the brain, liver, kidneys or lungs, no risk of sudden or premature death from heart paralysis." [This is saying a great deal.] Dr. Cook has found it to be a heart tonic, diuretic, anti-consumptive, non-irritant, without nausea, and acting promptly and positively in a few minutes. It produces a quiet, calm and natural sleep—no disturbed dreams, phantoms, hallucinations or depressions. The author reports cases of cardiac asthma with valvular disease of the tricuspid, puerperal eclampsia, and pneumonia treated with happy results. He has used it in one case of opium habit with good results. Patients, who before had used heart sedatives, opiates, alcoholic stimulants, the bromides, bromidia, chloral, chloroform, etc., express a preference for elixir paraldehyde. In short, it seems to be indicated in any condition calling for the above-mentioned sedatives and hypnotics.—*Practice*.

ANTIPYRINE IN THE TREATMENT OF CHOREA.—Legroux has communicated to the Academy of Medicine, Paris, the results of his treatment of chorea by antipyrine. He claims remarkable success, affirming that by the administration of antipyrine he has been able to reduce to a period of from one to three weeks (many of his cases getting well in a week), the duration of a disease which ordinarily lasts from sixty to ninety days.

His treatment is as follows: One gramme (fifteen grains) of antipyrine is dissolved in twenty grammes (five drachms) of syrup of bitter orange peel, and the whole is administered at one dose. Three such doses are given during the twenty-four hours. He considers it perfectly safe to give this dose to a young child, and all of the Legroux's patients are now treated in this way.

Legroux believes that antipyrine acts "by slowing the oxidation in the nerve centres, moderating nervous excitability, and enhancing the elementary nutrition." By its sedative action on the spinal cord, it has proved of use in the convulsions of strychninism, and recently Pemoine has shown that some cases of epilepsy have been markedly benefitted by antipyrine.—*Boston Med. and Surg. Journ.*, March 22, 1888.

INTESTINAL ANTISEPSIS IN TYPHOID FEVER.—In an inaugural thesis, M. Para precognizes the necessity for the internal use of antiseptics in typhoid fever. The antiseptic must be insoluble, and must be given in small doses. The most satisfactory material was found to be a mixture of naphthol and salicylate of bismuth (8 grains of each) in powder (half the quantity for children). Its administration should be preceded by a calomel purge (4 to 6 grains). Under this treatment the motions decrease in number, the abdominal distention becomes less, and both the liver and the spleen diminish in size.—*London Med. Record*, Feb. 29, 1888.

CHIAN TURPENTINE FOR CANCER.—Last year DR. CLAY reported the case of a gentleman whom two of the most experienced surgeons in London had pronounced to be the subject of advanced epithelioma of the tongue, who was cured under the Chian turpentine treatment. Recently the Lancet pulished a further short paper, containing no less than four cases in which the diagnosis of cancer was made by other surgeons, in one case confirmed by microscopic examination of a growth removed. All of these cases were cured by DR. CLAY'S treatment.—*Drug. Circular*, April, 1888.

LAVAGE IN CHILDREN.—LOEY, in *Prog. Med.*, reports success in the employment of lavage in the case of nineteen infants from one to sixteen months old, troubled with dyspepsia. The stomach was first evacuated, then warm water, containing a small amount of salt, was introduced until it returned perfectly clear. Relief was frequently instantaneous. The operation repeated a few times daily or at intervals, suffices for recovery.—*Buff. Med. and Surg. Jnl.* March 1888.

The Medical Age.

Vol. VI. DETROIT, APRIL 25, 1888. No. 8.

Original Articles.

TONIC-ALTERATIVE COMPOUNDS.

BY RAY R. MITCHELL, M. D.*

I do not belong to that class of physicians who make it a fixed principle of action to appropriate all the "good things" to be found in the medical journals and elsewhere, and to withhold from their professional brethren their own valuable experience. I am not a "shining light," and have not had the rich experience of an "old man" in practice, therefore it cannot be expected that I would furnish much that would interest and benefit the thinking, practical physician. But I am willing to contribute from my small store.

I will submit at this time some remarks relative to the value of combining syr. trifolium comp. and syr. hæmatic hypophos.

This combination was suggested to me sometime since in a letter I received from my esteemed friend, T. P. SIMPSON, M. D., Beaver Falls, Penn. With DR. SIMPSON'S consent I give below an extract from his private letter to me:

"I have been using the syr. trifolium comp. combined with the hypophosphites for more than a year, with increasing confidence of its utility in a wide range of pathological conditions. I have just recently commenced to use syr. hæmatic hypophosphites in place of the ordinary hypophosphites, and I naturally expect increased benefit from my prescription. The formula I generally employ for adults is as follows:

℞ Syr. trifolium comp.,
Syr. hæmatic hyp., aa fl. ʒ iij.
M. Sig.—Take two teaspoonfuls after each meal.

I have kept no notes of my cases and can only speak in a general way of the therapeutic value of the combination. It seems to be of peculiar value in cachectic, anæmic cases, especially where there is fear or suspicion of impending pulmonary mischief. It is well tolerated by the stomach, as some of my most brilliant re-results were obtained in children under two years of age who were suffering from aggravated indigestion and chronic bronchitis. Its constructive power is remarkable, as the increase in weight as well as strength of the children taking it was unusually rapid, also permanent. It seems to me that argument is unnecessary to prove the theoretic value of such remedies in asthenic conditions.

There is no doubt that the Syr. Trifolium Compound is an excellent tonic-alterative, if you please, and the hypophosphites have long been regarded as perhaps the most reliable constructive agents at our command. The combination of the two I have not found to be unscientific or incompatible in any way."

I was quick to act upon the hint of my friend, Dr. S., and at once prescribed it in the following cases:

Case 1.—Infant H., male, age sixteen months. Parents American, middle class. Scrofulous taint barely perceptible on close inquiry. Condition: Scarlatina and rubeola, one quickly succeeding the other. Sequelæ: Inflammation of cervical glands, swollen tonsils, otorrhœa and general cachexia and anæmia; constant febrile disturbance; anorexia; restlessness; progressive emaciation.

Treatment.—After six weeks of unsatisfactory medication, I prescribed:

℞ Syr. trifol. comp.,
Syr. hæmatic hypophos., aa f ʒ iss.
Tr. iodine f ♁ j.

M. Sig.—Dose, one-half teaspoonful three times a day between meals.

The otorrhœa I treated as follows: With a bulbous ear-syringe I washed the ear daily with this solution:

℞ Carbolic acid, c. p., gtt. ij.
Boracic acid, gr. x.
Sulphate of zinc, gr. j.
Water, fl. ʒ j.
M.

I then dried the ear and applied iodol, concluding by introducing absorbent cotton.

At end of two weeks the discharge has ceased; the child's appetite has returned; no fever; strength rapidly increasing; inflammation of glands has subsided; the chronic enlargements very slowly disappearing.

Case 2.—Mrs. M., American, age 33, housewife; malarial attack followed by complete general prostration. Condition aggravated by nursing an infant during her illness. The malarial element was soon eliminated, but there was left a general weakness that was distress-

* Member of the North-Central Ohio Medical Society.

ing to the patient and annoying to the medical attendant. Although a moderate appetite remained, assimilation was so impaired that no strength returned to encourage the brave but weary mother.

The ordinary tonic doses of quinine produced severe urticaria in this case. I resorted to other tonic treatment, but improvement was only moderate until I prescribed the syr. trifolium comp. and syr. hæmatic hypophos., as suggested by DR. SIMPSON. In ten or fifteen days more she was transformed from a tottering invalid to a lively convalescent. I must allow due credit, of course, to the long-needed rest in bed and to the favorable change in the weather.

Case 3.—Miss S., American, age 22; mother consumptive. This young lady resides with distant relatives, and her health will not permit her to do more than to assist in light housework.

When she presented herself for treatment she complained of pharyngeal, laryngeal and bronchial irritation, and a careful examination revealed that the insidious inflammatory action had already involved the apices of the lungs, as indicated by the dullness on percussion and by the increased inspiratory murmur in the subclavicular spaces. The pulse-rate and respiration were nearly normal as to frequency, and the body-weight had not yet been noticeably affected. However, the yellowness of the ocular conjunctiva; the dry, coated, small red tongue; the impaired digestion; constipation; the absence of white crescent (lunula) at the base of the finger nails; the physical signs already given, and the family history, all pointed to that unfortunate dyscrasia which is irresistible in its approaches and merciless in its effects.

As will be observed further on I am impressed with the vital importance of maintaining elimination and assimilation in these cases. I fear some of my colleagues do not recognize fully the necessity of securing a proper elimination as the means of first importance in attaining the real object, good assimilation.

Treatment: For the throat, larynx and bronchi I ordered

℞ Fl. ext. eucalyptus globulus,
Liquid ergot, normal, ää f ℥ j,
Carbolic acid, c. p. gtt. viij,
Alcohol, f ℥ ij.

M. S. Spray once daily with Semple's inhaler. I also directed counter-irritation for the subclavicular spaces.

I prescribed for internal use

℞ Syr. trifol. comp.,
Syr. hæmatic hyp., ää f ℥ ij.
Fowler's solution arsenic, f ℥ j.

M. Sig.—Two teaspoonfuls after each meal.

An incidental and occasional prescription was the deservedly popular pill of aloin, strych. and belladonna, for the constipation.

The young lady has been under treatment now five weeks, and although she has had a severe attack of "mumps" at one time, and of "sick headache," to which she is subject, at another, she is greatly improved and much encouraged. The harrassing subjective symptoms attending the "throat irritation" and the unpleasantly suggestive soreness over the apices of the lungs are improved one hundred per cent. Her appetite is better; she has more strength; her complexion is clearer; in fact she is better. I am aware that little can be expected from any treatment, much less in five weeks, but it is a point gained if we can stay the insidious advances of phthisis. I am also cognizant of the fact that some reader will remark that arsenic alone may have done the good work. In answer I will ask him if the trifolium comp. and hematic hypophos. may not have made the improvement more certain. There is as much in my question as in his assertion, surely.

Some readers may insist that I shall give "a reason for the hope that is in me," referring to my belief in the therapeutic value of the combination mentioned, *i. e.*, syr. trifolium compound and syr. hæmatic hypophos. While my reasoning may not be strictly scientific, I hope it will be found to be in line with the usual arguments of good, practical physicians deciding upon the therapeutic indications of a case, and the best manner of meeting them in a given case.

In syr. trifolium compound we have as the leading medicinal ingredients, stillingia, burdock, poke-root, berberis aquifolium, prickly-ash bark, and potassium iodide, all good and well-known agents. It contains also red clover and cascara amarga. The last two are not so familiar to me, but PROF. A. ATKINSON, of the Baltimore College of Physicians and Surgeons, has written favorably of the action of cascara amarga in constitutional syphilis. With reference to the red clover, there seems to be a growing tendency, based on clinical experience, to make use of this drug as an alterative. To what degree it may be useful in the formula of syr. trifolium comp. I am not prepared to state.

The objection may be made that this compound is "another shot-gun prescription." But is this criticism just? The charge can scarcely be made to apply in the bad sense with which we use the opprobrious term. In such cases we mean "a scattering shot," which it is hoped will "hit something." A thoughtful glance at the formula will make the fact clear that the therapeutic properties of these various drugs converge to one central point. And what is that? What is it they are intended to accomplish? When we prescribe an alterative is it not our main purpose to do these two

things: (1) promote elimination and (2) assimilation? Indeed, is not this the underlying principle of nearly all medication? We must have proper elimination and assimilation even in surgical cases. From a common case of "sore eyes" to the union of a fractured femur we find it necessary. How very important it is then to promote these functions in a dyscrasia where the general morbid condition exerts its blighting influence on every tissue of the body. To illustrate: A young person (see case No. 3), child of consumptive parents, has been cachectic and anæmic for a few months. The incipient stages of phthisis are feared. We find that tissue-metamorphosis is abnormally rapid, while the elimination of waste products is less than in health. Then follows reabsorption of deleterious excrementitious matter, which in turn poisons the nerve centres, from which comes an aggravation of the already unpleasant symptoms. This will apply as well to many of our chronic cases, where we have somewhat similar pathological processes. In all these cases it is our first object to adjust tissue-waste and elimination, so that there may be a proper balance between the two. This must be done gently in most chronic cases, to accomplish the best results. Now does not a study of the Syr. Trifolium Comp. reveal the fact that it is admirably adapted to this end?

As for the hypophosphites, I have already said that I believe them to be efficient for the purpose for which we use them. In Syrup Hæmatic Hypophosphites we have something more. It will be noted that it contains quinine, iron and strychnine hypophosphites in addition to the usual ingredients of the syr. hypophosphites. We know quinine, iron and strychnine are good, but we also know that frequently certain patients will not assimilate these useful agents in the dose and in the form we prescribe them. It is asserted that they will be more readily taken up by the system if prescribed in the form of the hypophosphites. At least we find that quinine, iron and strychnine hypophosphites are better borne, and that patients gain in flesh; while under the use of the plain quinine sulphate, muriate tincture of iron, etc., the same patients will retrograde. The smallness of the dose may be an important factor. It will bear repetition that it is not the quantity we administer but the amount that is appropriated by the system that accomplishes the result. When we learn to exhibit a remedy like iron as a constructive in doses more nearly comparing in quantity with the proportion of the same agent in our food we will have taken along step forward.

In combining these two preparations, syr. trifolium comp. and syr. hæmatic hypophos., it is true, we have quite an array of ingredients, but that does not deter me. I will refer again to our food. The great variety of elements, proximate principles, etc., entering into my beefsteak, bread and butter, potatoes and milk, do not cause me to hesitate, when I come to the table, if I have a good cook. "Aye! There's the rub!" The greater the number of ingredients in a medicinal compound, the greater its power for good or harm, and the greater must be the chemical, therapeutical and pharmaceutical skill of the compounders. Some physicians insist upon using but one drug at a time, but the experience of most medical men will confirm me in my statement that a judicious combination is often an improvement. The pill aloin, strychnine and belladonna is a better anti-constipation pill than aloin alone, or aloin and strychnine, or aloin and belladonna. Add to these three ipecac, and for many conditions you have a pill superior to the first named. This principle is true of flavors and perfumes. Now, where is the limit? Who will say where the line must be drawn? It must be granted, of course, that the more complex the compound, the greater will be the risk of failure. The "routine" prescriber and the careless pharmacist had as well adhere to simples.

There is another important feature in the administration of this combination. It is an excellent adjuvant for potassium, or mercurials, or for any of the more active medicaments we are wont to use in cases were prompt and heroic treatment may be necessary.

This combination is one of the most pleasant-tasting preparations I have ever prescribed; and I find it to be greatly to my interest to cater to the wishes of my patients with regard to the palatableness of my prescriptions.

THE TREATMENT OF PLACENTA PRÆVIA.

BY CHAS. N. VALIN, M. D., BELŒIL, QUEBEC.

My conception of a medical journal is that it should have for its aim the instruction of the practitioner, through the discussion of sound principles and the indication of the true way in science. I must, therefore, enter my protest against the conclusions which are inevitable from the report of the two cases of placenta prævia by DR. COLLAR, in the MEDICAL AGE of March 10th, ult. The treatment, besides having been unsuccessful in at least one of the cases, was clearly unscientific, and the doctor could not reasonably expect to escape criticism for having employed it. He begins by stating that reports of cases in the AGE have been of great service to him, but certainly he can find in them little justification either for the form of tampon he describes, or the use of the persulphate of iron which he employed. He declares of Case 1 that "the hæmorrhage continued despite the tamponing with sponges

and pieces of cloth." I regard the tampon as a *sine qua non* in placenta prævia, but unless it is properly made and applied it is a delusion and a snare. It is only the classical tampon which is of value, and it can be relied on. When it fails to check the hæmorrhage it has been improperly applied.

The classical tampon requires a great quantity of material; 30 to 40 little balls of lint, of the size of a walnut, impregnated with some fatty substance, *e.g.*, carbolized vaseline, are necessary. The first 15 to 20 are tied by a strong thread, which facilitates their withdrawal. The quantity of material required to make a good tampon is apt to astonish the young physician. But the physician readily understands that it is a question not only of filling the vagina, but also of the pelvic cavity. The vagina, too, is capable of a great dilatation, and consequently, if the tampon is insufficient, *i. e.*, if it does not distend the vagina to its maximum, the blood coming from the uterus will make its passage between the vaginal walls and the periphery of the tampon. Vaseline, or some fat substance, is necessary, in order to secure the closest co-aptation of the many little balls of lint, thus making a solid, close and compact body. The safety it procures is absolute. It is not necessary to soak the balls of lint in an astringent liquid, this procedure being injurious. The tampon is not designed as an astringent agent, but a purely mechanical one, the great power of which resides in the fact that it opposes an insuperable dike to the flooding blood. To saturate it with an astringent is apt to corrode or cauterize the vaginal mucous membrane, and thus inflict useless suffering. Moreover, it is easy to understand that the astringent liquid is useless when applied with a tampon, because it (the tampon) is not introduced within the uterus—the origin of the flooding.

To properly apply the tampon, the patient must be placed in the obstetrical position. We begin by emptying the bladder, rectum and vagina, if the case is not too urgent. The speculum is not needed at all. I introduce the balls of lint, well impregnated with carbolized vaseline, the one after the other, packing them well with the index finger at the bottom of the vagina in order to fill every interstice or space. After having made so real and solid a rampart, I close the anterior vaginal space with wadding or lint. The vagina must be so filled up that the perineum is rendered convex by the pressure coming from inside, and the vulva must also be open. Lastly, I apply on the genital parts a good quantity of lint, making a cushion, and keep the whole in place with a T-bandage. This is the classical and real tampon, and the only good one. Every other tampon is not good and consequently dangerous on account of the false security it gives. The tampon in the case No. 1, reported by DR. COLLAR, having been mixed, *i. e.* made of two different parts, with sponge and strips, was doubly bad, on account of their inability to close perfectly well the vaginal canal.

DR. COLLAR says, in his article, that after having turned the child, he left him in the pelvic cavity for twenty minutes, as a tampon. Now the head cannot make a good tampon. On account of its irregular shape; every point of the head is not in absolute contact with every point of the pelvic circumference and, consequently, there are many empty places through which the blood easily escapes, finding an open door.

A further criticism on the procedure is contained in the natural query as to whether it is well to play with the child's life? Is it rational to kill the fœtus by making a bad tampon with it? This is very repugnant to every sensible man. The more so as this procedure is not scientific and still more foolish, for the reason given. We must suppose that the fœtus was dead, although we are left in doubt on this point. But even under this supposition, the correct practice would have been to deliver as soon as possible, and this for two reasons: 1st, because the fœtal head is not a good tampon; and 2nd, because by that procedure he was working against his aim. By what mechanism is a uterine hemorrhage stopped? Clearly by the uterine retraction and contraction. Now, how could these two functions be operative with the fœtal head and the detached placenta in the position in which they were left? The first and principal indication was to deliver as rapidly as possible, and to assure the uterine contraction.

Again, as the patient was exhausted by flooding, chloroform narcosis was dangerous in the extreme, on account of the cerebral anemia which it produces.

Case 2.—DR. COLLAR says: "Thinking it not best to disturb the patient, left some powdered persulphate of iron to be used on a second tampon if necessary." This tampon was to be placed by the patient's husband. I must emphatically protest against such conduct. The physician who knows how great and terrible is the danger to the patient in such cases, must not abandon his patient, who, if she ever needs a physician, it is under this circumstance. And, above all, the physician must not commit to ignorant and unskilful hands the administration of an agent or treatment which will be useful, useless or even dangerous, according to its proper or improper management. The patient's life depends in these cases on the operator's ability and knowledge.

As has been suggested, the hemorrhage does not come from the vagina, neither from the external part of the os uteri. The persulphate of iron or any other astringent is, therefore, useless.

The tamponing with the fingers, resorted to by DR. COLLAR, is illusory, and is certainly an abominable practice. The indication, and the only one, was to apply a good tampon, which should have excited the uterine contraction, stopped the hemorrhage and dilated the os. After wating an hour or two, perhaps more, for regular and strong contractions, which are pretty certain to be established, delivery may be readily accomplished in such cases.

The tamponing after delivery, as practiced in Case 2, is very dangerous, because the blood, not finding an exit, is accumulated in the uterus, which may be distended to enormous proportions. It is much better in such a circumstance to give ergot hypodermically, to make frictions on the womb in order to promote or excite uterine contraction. Ergot is under these conditions most indicated, and is a capital remedy. But if the hemorrhage continues despite the introduction of the hand in the uterus to excite contractions, the frictions and the administration of ergot, we must make intra-uterine injections of hot water with persulphate of iron. Here the hot water excites the uterine contraction, coagulates the blood, and is helped in this way by the styptic action of the persulphate of iron, which acts directly now on the flooding blood-vessels.

TRANSFUSION AND ATROPINE IN CASE OF OPIUM-POISONING.

BY HAL C. WYMAN, PROFESSOR OF PRINCIPLES OF SURGERY AND OPERATIVE SURGERY IN MICHIGAN COLLEGE OF MEDICINE AND SURGERY.*

MRS. SMITH, age 27, wife of JOHN SMITH, a shipping clerk, mother of three children all dead, a woman of strong physique, of English descent and of fair intelligence, with a history of drunkenness.

March 19, at 8 A. M., she attempted suicide. Cause, domestic infelicity brought about by debauch and continued drunkenness. She took ʒ iv laudanum, and was found at 11:15 A. M., three and one-quarter hours having elapsed for the absorption of the poison. When found she presented the following condition:

The general appearance of the skin cyanotic, tongue protruding from mouth, pupils rigidly contracted, extremities cold and clammy, no apparent respiration, no pulse at the wrist, seemingly beyond resuscitation. She was taken to the Emergency Hospital and the stomach immediately emptied of its contents by means of a stomach pump. A small amount of fluid obtained, the character of which showing at once the total absorption of the poison. The alimentary canal was thoroughly washed out with mustard water by introducing a rubber tube into the œsophagus, acting as a syphon. An injection of strong coffee was now given into the stomach, which was followed by four (4) hypodermic injections of atropine, $\frac{1}{25}$ gr., at intervals of 20 minutes.

Artificial respiration being continually kept up by pulling the arms above the head and compressing the shoulders alternately, an injection of strong coffee into the rectum was given. The pulse at this juncture was felt, feeble and intermittent. Faradism was applied, the pole being placed in the median line over the diaphragm, the other to the phrenic nerve, and continued for four hours. The respiration increased to 6 a minute; pulse 120. The pupils thoroughly dilated from effect of hypodermic injectious of atropine. The left arm was tightly corded above the elbow and the left median basilic vein opened with difficulty, and about ʒ iv of black venous blood taken out and a saline mixture or artificial serum transfused. Hot and cold cloths were applied alternately over chest and abdomen, which greatly accelerated and strengthened the respiratory centres. She was catheterized and the bladder twice emptied of its contents. At 9:30 P. M. signs of consciousness began to develop, and from this her recovery was rapid. A more obstinate and decided case of opium-poisoning could not well be and recover.

*Reported by Howard Mann, Student of Medicine.

LECTURES ON THE CUTANEOUS MANIFESTATIONS OF SYPHILIS.

BY GEORGE H. ROHE, M. D.*

LECTURE 1.

GENERAL CONSIDERATIONS.

Syphilis is a chronic infectious disease of the system, which in the course of its evolution and development produces characteristic symptoms and lesions in various organs and tissues of the body. The following article will be devoted to the consideration of one class of these morbid changes, namely those involving the general integument and its appendages.

The cutaneous manifestations of syphilis were recognized by the earliest writers upon the venereal disease. Thus, LEONICENUS (1497), GASPARD TORELLA (1498), PETER PINTOR (1500), GRUNPECK (1503), JOHN DE VIGO (1514), and others describe the eruptions with more or less accuracy. On account of their prominence, these lesions have always commanded a large share of the attention of syphilographers, as well as of the general profession and the laity.

The syphilitic skin diseases may be properly regarded as the first evidences of the constitu-

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tional effects of the venereal infection. The chancre and enlarged lymphatic glands are more or less local manifestations of the virus due to direct irritation. When, however, the period of general eruption, with its accompanying fever has declared itself, the poison has reached the blood, which fluid then becomes itself infective and may communicate the disease if inoculated.

GENERAL MORPHOLOGY AND CLASSIFICATION OF SYPHILITIC SKIN DISEASES.

The general features of the cutaneous lesions due to syphilis, resemble more or less closely those of the ordinary skin diseases. For this reason most of the older, and indeed many modern writers on syphilis adopt the ordinary dermatological nomenclature to describe syphilitic skin diseases, using the adjective "syphilitic" as a differential designation. Hence one meets frequently in medical writings such compound names as "syphilitic roseola," "syphilitic acne," "syphilitic lupus," "syphilitic pemphigus," and even "syphilitic eczema." If it is borne in mind that acne, lupus, pemphigus, and eczema on the one hand, and syphilis on the other are perfectly distinct morbid processes, having nothing in common, and that the name syphilitic lupus is not intended to convey the impression of a mixed disease, partly lupus, or even a lupus occurring in a syphilitic subject, but that it means simply in a lupus-like syphilitic lesion, it is plain that such a terminology leaves much to be desired on the score of clearness and simplicity. The first departure from this unphilosophical and confusing nomenclature was made by BIET,† (1829) who classified the syphilitic skin diseases according to their elementary lesion. The classification of BIETT, modified in some unimportant particulars, is the one adopted by most syphilographers at the present day.

ALIBERT (1838)‡ introduced the collective term "syphilide" to characterize the cutaneous manifestations of the venereal disease. Inasmuch as all syphilitic eruptions are primarily dependent upon the presence of the syphilitis virus in the blood or tissues no objection can be urged against using this term and defining the different lesions by adding the proper adjective.

Syphilis of the skin manifests itself under the elementary forms of hyperæmic discolorations, papules, pustules, tubercles and nodules; and as secondary or consecutive lesions, namely, ulcers and pigmentations. A simple classification of the syphilides would therefore be as follows:

1. The erythematous syphilide.
2. The papular syphilide.
3. The pustular syphilide.
4. The tubercular syphilide.
5. The nodular syphilide.

As consecutive lesions or processes may be added:

1. The ulcerating syphilide.
2. The pigmentary syphilide.

GENERAL DIAGNOSTIC FEATURES OF THE SYPHILIDES.

The diagnosis of syphilitic eruptions should offer little difficulty, if the definitions of the elementary lesions are clearly appreciated and borne in mind. There are, however, some general characters of the syphilides, a knowledge of which may render their recognition still more easy. Among the more important of these characters are the following:

CHRONOLOGICAL SEQUENCE AND COURSE OF ERUPTIONS.

Clinical observation has taught that the syphilides follow each other in a certain consecutive order. Thus, those lesions affecting principally the superficial layers of the skin occur early, while those extending more deeply follow later. For example, the first manifestation of constitutional infection is usually the erythematous syphilide, which may be succeeded in turn by the papular, pustular, tubercular and nodular or gummatous forms. RICORD was the first who divided syphilides into two classes, the early (*syphilides præcoces*) and the late (*syphilides tardives*). The first class, consisting of erythematous, papular and pustular, belonged to the secondary period, while the other were manifestations of the tertiary stage. This eminent syphilographer further laid it down as a law that the period of eruption of the syphilides is never reversed. Thus, an erythematous syphilide never follows a papular eruption, although the erythematous form may at times not appear, or perhaps be overlooked. This rule appears to have no exceptions for any individual attack of syphilis, but ZEISSL* has pointed out that in case of reinfection, the evolutionary cycle of the disease may be repeated and one individual may in his lifetime have an erythematous following a papular syphilide, but this could not occur during the same attack of syphilis.

The careful study given to all features of the disease has shown that the division of the syphilitic eruptions into early and late as made by RICORD, is only tenable in a general sense. Cases not infrequently occur in which some of the latter manifestations (tubercles and gummata) are developed almost contemporaneously with the earlier eruptions such as papules and pustules.

Reckoning from the period of primary infec-

† Practical Synopsis of Cutaneous Diseases, Cazenave and Scheder, Philadelphia, 1829, p. 337.

‡ Nosologie Naturelle, Paris, 1838.

* Lehrbuch der Syphilis. Bd. II. 3te Aufl. 1875, p. 103.

tion or inoculation, the first development of the cutaneous lesions may be fixed at from nine to twelve weeks. The different eruptions succeed each other in crops with periods of rest between the successive eruptions until what is usually known as the secondary period has been brought to a close. This generally coincides with the disappearance of the pustular syphilide. After an interval of very variable duration during which no manifestations of the disease may be present, the tertiary stage, so-called, characterized by the eruption of the neoplastic syphilides, namely tubercles, gummata and their consequences begins. Neither the duration of the secondary stage, the interval of latency, or the tertiary stage can be given with any approach to correctness. The secondary stage is, however, brought to a conclusion usually within a year from the first appearance of the erythematous exanthem, especially if the patient has been subjected to appropriate treatment. The interval between the secondary and tertiary periods is usually several years, although the latent period may be entirely skipped, the secondary stage passing directly into the tertiary.

In the secondary stage, or period of the precocious syphilides, the eruption is usually symmetrical and the lesions profuse, the blood, pus and possibly some of the normal secretions infectious and inoculable. In the late or gummatous stage, on the other hand, the lesions are few, not symmetrically distributed, and the blood and secretions have lost their infectivity. In fact, according to some observers, the disease, syphilis, has disappeared, and the morbid manifestations are merely relics of a preceding pathological process.

LOCALIZATION AND DISTRIBUTION OF THE SYPHILIDES.

As just stated, the early syphilides are symmetrical and with lesions profusely distributed. The prevailing localities for the eruptions are the trunk, the proximal portions of the extremities, the scalp, the border of the capillary growth on the forehead and nape of the neck, and certain portions of the face, especially the angles of the mouth and alæ of the nose. The flexor surfaces are more prone to the eruption than the extensor, and the palm of the hands and soles of the feet, which are usually spared in non-syphilitic affections of the skin, are especially liable to syphilitic eruptions, more particularly the papular and squamous varieties. In localities where two surfaces of the skin are much in contact, as between the buttocks, the perineum, the axillæ, between the chest and pendulous breast in women, the papular syphilide, especially that form known as the moist papule or condyloma latum has its sight of predilection. Pustular syphilides are most frequently found affecting the hairy regions of the body, while the site of predilection of some of the latter forms such as subcutaneous gummata is found on the thighs and especially the upper half of the leg.

COLOR OF SYPHILITIC ERUPTIONS.

In the text-books and standard works upon syphilis much stress is laid upon the color of syphilitic eruptions. But the simple statement ordinarily made that the syphilides have a "raw ham" color, or "copper color" is not sufficiently descriptive, for cases frequently occur to which neither of these characterizations apply. While the syphilitic coloration is nearly always some shade of brown, the depth of tint varies considerably with the age of the lesion of which it is a part. FOURNIER speaks of "a sombre red tint, a brown red, exactly identical with the hue of a slice of lean ham" and of "a tint not so dark, of red mingled with yellow, very happily compared by SWEDIAUR to the color of copper."* NOURNIER states that the color recalls to the eye "the tint of the old kitchen utensils, well polished, carefully kept." But other authors, among whom are ZEISSL,† and GRUNFELD,‡ compare it, also after SWEDIAUR, to tarnished copper. SWEIDAUR himself, however, speaks of "spots of a reddish purple, yellowish, or livid color," and of "brown or copper-colored spots," and again of "dark copper-colored spots,"§ thus leaving it in a measure uncertain whether he meant polished or tarnished copper.

Any one who makes a personal study of his cases will soon come to the conclusion that neither raw ham nor copper is a good standard for comparison with the color of syphilitic eruptions. The lesions may vary from a dull yellowish to dark brown, but one soon learns to recognize a peculiar quality in the tint which is quite characteristic, but not easily described, and which seems also to have eluded the artists who have made portraits of cases.

The color of a syphilitic lesion of the skin is not due simply to local hyperemia, since it does not entirely disappear under pressure. There is, in addition to the inflammatory redness an extravasation of blood pigment to which the darker shade of coloration is due. KAPOSI‖ intimates that the specific diathesis may have some part in the production of the discoloration. CORNIL¶ says that this coloration is owing particularly to extravasations of red blood-corpuscles; as the spots are disappearing they become yellow, greenish-yellow, gray, fol-

*Lesons sur la Syphilis. Paris, 1873.

†Op. cit., p. 96.

‡Eulenberg's Realencyclopadie, Bd. 13, p. 304.

§Complete Treatise on Syphilis. Translated from the Fourth French Edition. Philadelphia, 1815.

‖Syphilis. Stuttgart, 1881, p. 129.

¶Syphilis. Philadelphia, 1882, p. 129.

lowing the tints of blood-pigment in a superficial ecchymosis." But this is not peculiar to syphilides, as in various non-specific cutaneous affections similar pigmentary changes may occur. However, when all is said, one may often derive some assistance in diagnosis by carefully observing the color of the eruption, and comparing this symptom with others. The physician who relies upon the color of a lesion alone to the exclusion of other symptoms, will frequently make mistakes.

MULTIFORMITY OF LESIONS.

Although it has before been stated that the syphilides are characterized by a more or less uniform sequence of eruption, it is frequently the case that more than one form of lesion is present at the same time. Thus erythematous, papular, pustular and tubercular lesions may all co-exist, or the eruption may consist of one variety of lesion, but in different stages of development. This is due to the chronic course of the syphilides, and although some cases of eczema present a similar multiformity of lesions, the clinical history of the two diseases is so different that they are not liable to be confounded with one another.

CONFIGURATION OF THE ERUPTION.

Most of the syphilides tend to assume an annular or crescentic arrangement. A group of papules, pustules or tubercles is usually found to form either a complete circle, crescent or curved line. This is especially well shown on the forehead, the nape of the neck, or the lower part of the face. In large flat tubercles the absorption begins in the centre of the lesion, and after involution has progressed somewhat a circular ridge remains which gradually disappears by an extension of the absorption from within.

But this configuration is as little specific as the other peculiarities already mentioned. Ringworm, some cases of lupus and annular erythema show the same arrangements of lesions. Hence too much reliance must not be placed upon these symptoms when taken singly.

SUBJECTIVE SYMPTOMS.

Itching, pain or burning are nearly always absent during the development of the earlier forms of syphilitic eruptions. In this absence of subjective symptoms a valuable aid to diagnosis is given to the physician. It must not be forgotten, however, that some non-specific eruptions, which present a marked similarity to certain syphilides are frequently devoid of subjective symptoms. On the other hand, syphilides sometimes itch, especially in persons with a delicate and irritable skin, and some gummata are exquisitely painful.

RACIAL PECULIARITIES.

Livingstone has stated that the negroes of the interior of Africa are exempt from the ravages of syphilis even after abundant opportunities for infection. Although it is frequent among the natives inhabiting the west coast, he says: "It seems incapable of permanence in any form in persons of pure African blood anywhere in the centre of the country. In persons of mixed blood it is otherwise; and the virulence of the secondary symptoms seemed to be in all cases that came into my care, in exact proportion to the greater or less amount of European blood in the patient."* In the United States, opportunities for observation upon persons of unmixed negro blood are becoming rarer every year, but physicians of much experience in the South will agree that the colored race suffers much more severely from syphilis than the white.

In colored individuals, syphilis of the skin presents certain peculiarities which call for notice in this place. Few observations bearing upon this point are on record. The most thorough study of the effects of syphilis in the negro is contained in a paper by DR. I. E. ATKINSON, of Baltimore.† From an analysis of 100 cases of the disease in the colored race, it appears that the predominent character impressed upon syphilis in the negro is a pronounced tendency to suppuration. The primary lesion is more destructive, the adenopathy is more extensive and the glands in a very much larger proportion of cases than in whites, break down and suppurate, and all eruptions except the erythematous showed a marked proclivity to become pustular. Erythema is difficult of recognition in the darker patients. The small papular syphilide is liable to be mistaken for keratosis pilaris. Attention has also been directed to this possible error by DUHRING. The summits of the papules, when not pustular, often have a whitish coloration, partly due to an accumulation of fine scales, and partly to a more rapid exfoliation of epithelium. The pustular syphilide not infrequently presents a close resemblance to cases of smallpox, as in two cases who presented themselves in the clinic not very long ago.

It is hardly necessary to call attention to the fact that the "raw ham" or "copper" color is of no value as a diagnostic sign in syphilitic eruptions occuring in the colored race.

RECAPITULATION.

The syphilides are the first manifestations of general systemic infection.

Syphilitic eruptions are either erythematous, papular, pustular, tubercular or nodular, or

*Travels. London. 1857.

† Early Syphilis in the Negro. Md. Med. Journal, Vol. 1. 1887, p. 135, *et seq.*

some mixed forms, modifications or consequences of these elementary lesions.

The syphilides follow a regular sequence in their eruption. The pustular or tubercular forms never precede the erythematous. The earlier forms are usually superficial, while those coming later involve the skin more deeply.

The average period of incubation of the primary lesion is three weeks; from the appearance of this lesion to the outbreak of the first syphilides, six to ten weeks, and the tertiary manifestations are rarely encountered until after a year from the date of infection.

During the secondary period the blood and pathological secretions are infective. After the development of the tertiary or gummatous stage the infectivity of the blood and tissues has disappeared.

The early syphilides are symmetrical and often profusely distributed. The later forms occur singly and show no tendency to symmetrical arrangement. The flexor surfaces are more liable to be the site of lesions.

The color of the syphilides is usually a reddish or yellowish brown, described by authors as the "raw ham" or "copper" color. This color does not disappear on pressure, being partly due to extravasation of blood pigment into the tissues.

The lesions are usually multiform, a pure example of papular, pustular or tubercular syphilide being seldom seen. Syphilides are frequently aggregated in circular or crescentic groups. This is, however, not a characteristic symptom. Subjective symptoms, as itching, burning and pain are usually absent in syphilitic eruption.

In the negro race as met with in this country, syphilis shows a pronounced proclivity to the development of suppurative lesions and glandular enlargements. In this race the color of the eruption is of no aid in diagnosis.

In order to make an exact diagnosis of a syphilitic eruption the physician must have some knowledge of dermatology, be a good observer, and be able to group important symptoms in their proper relations and bring them into connexion with the whole clinical history, objective and subjective, present and past, of the case under examination.

ANTISEPTIC MIDWIFERY.

BY E. B. WARD, M. D., LAINGSBURGH, MICH.

Once more unto the front I meekly come
And doff my derby to you, gentle sirs,
Whose potent words have reached my quiet home
And passed into my large and generous ears.
And, knocking stand and drum my tympanum
As tho' in anxious search for some reply
To anxious inquiries which seem to come
Hot from "Antiseptics in Midwifery."

And now I fain would lay my pencil down,
Lest I, in innocence, inflame your wrath,
And hie me to some quiet place in town
And take with care an antiseptic bath.
For such-like washings guard against disease
And vile infection's swift and direful spread,
And possibly the mind they might appease,
And purify the thoughts you so much dread.

Still, I will venture on a word or two
Which (fumigated by a sulphur match)
May possibly more clear present my view
Of antisepsis; and you need not catch
The ailment either which torments my mind,
But, calmly listen to my pointless sallies,
And turn away unscathed as you will find,
Or, take the thing *per vias naturales.*

I would not—here again my pencil stops
And, like a timid fawn, is loth to go,
As tho' in fear of certain overslops
Which might occur if freely humored so—
And still I say I would not wonder much
If the near future man should come to think
(With head supposed to be entirely level)
The world a fraud, or, if not such,
That 'twas created by the very Devil.

That unarmed mortals 'gainst the trooping hosts
Of fell disorders are sent forth to fight,
And aimless wander on like frightened ghosts
To drop behind their tombstones out of sight,
Or, catching up some fancied weapon go
Onward to battle in a feeble way
And hurl defiance at the tireless foe
Who sweeps the field at last and wins the day.

Now, I don't think so; but it seems to me—
Tho' I've not wisdom such as gods possess—
That men themselves are in some small degree
Originators of their own distress.
That Nature has a tendency to right,
And to repair the damage men have done,
And rarely puts them in so bad a plight
But what relief may come to anyone.

I don't believe that water, earth, and air
Are studded constantly with poison germs,
And certainly I think with cleanly care
They tend to healing; tho' the very terms
Seem now-a-days synonymous with death.
—The earth a resting place from woe and sin;
The air for inhalations, not for breath;
And water—well, its good to wash feet in.

Nor yet that woman—fairest flower of earth—
Is doomed by Nature never to be glad,
And feel that Death nigh when she gives birth;

Or wear betimes an antiseptic pad.
'Tis nonsense! Women think, and live and grow
By God's indulgence and at man's expense,
And will continue on for ought we know
So long as doctors use some common sense.

I want more facts on the relationship
'Twixt micro-organisms and disease,
Before on truth I loose my hold, and grip
A phantom which itself is ill at ease,
And which tho' now it shows some signs of life,
Tomorrow may have died and left no sign
To salve the wounds of those who in its strife
Went down to mourn, to murmur and repine.

Now, in conclusion: I would not deride
The use of antiseptics in their way,
But only when all else is put aside
And they alone are left to win the day,
And carry off the palm, which may belong
Not to the treatment or the doctor's care,
But to the fact that nature—always strong—
Was left a chance to get her work in there.

Correspondence.

PLACENTA PRÆVIA.

Having been much engaged I have not looked at my medical journals for some time. To-day I read in No. 5 (March 10th) DR. COLLAR'S treatment of two cases of placenta prævia. The treatment I think was wrong in both cases. In the first case, the head should have been delivered as soon as the body, then placenta, and by so doing the woman's life might have been saved. In the second, as soon as hemorrhage commenced I would have used Barnes' ready dilators, and finished the delivery speedily. Injections of hot water, ergot, and other drugs might have restored her earlier. Do not think tampons after delivery are safe, and the profession are nearly a unit on this point. Will furnish some cases from my own practice after a while.

C. R. CULLEN, M. D.

HANOVER, VA.

A LARGE MOLAR.

A few days since MRS. B., an aged lady, called on me to extract an upper molar. On looking into her mouth I was greatly surprised to see a tooth that seemed as large as the molar of a horse. I expected when I applied the forceps to see the calcareous deposit break off, but as the tooth was easily drawn, it remained on and I was rewarded with a tooth that measures three inches in circumference either way, after being washed and dried, and weighs 134 grains. It seems that the deposit had been so gradual that the old lady had not noticed it, as she said it had been so large for years.

O. B. SURFACE, M. D.

INDIANAPOLIS, IND.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., APR. 25, 1888.

Editorial.

THE TREATMENT OF DYSPEPSIA.

There is probably no disease on the list which is subjected to so much routine treatment, and with such unsatisfactory results, as dyspepsia. We referred in our last to the observations of GERMAIN SEE touching the nature of the affection. These observations, should they be verified by others, must prove very valuable as aids not only to the correct understanding of the nature of the affection but also to the adoption of more correct methods of treatment than have been in vogue, although certain of his declarations are not in strict harmony with our experience. DR. SEE classifies the treatment of dyspepsia under three heads: Chlorhydrotherapy, Alkalinotherapy and Evacuants. The first covers the exhibition of hydrochloric acid, an agent as to the value of which DR. SEE has always had grave doubts, despite the authority of TROUSSEAU. He declares that while the acid is of possible value, especially in connection with pepsin, in cases of deficient secretion of acid by the stomach, it cannot be of any value when this acid is secreted in excess. Here we would respectfully differ. Pyrosis may be due to either excess or deficiency of acid secretion, and, in our experience, hydrochloric acid is valuable in both cases. Given for some time, say an hour, before a meal, the acid prevents that glandular activity of the stomach to which excess of the normal acid of the stomach is due. Given after a meal in cases in which the activity is due to decomposition of the food from lack of the proper secretion of acids, and it aids digestion to the prevention of this decomposition, with its resulting acidity. DR. SEE'S suggestion of withdrawing the contents of the stomach during the existence of hyperacidity to test them for the nature of the acid which they contain, whether those of secretion or those of decomposition, must mark a decided advance in the treatment of dyspepsia, by enabling the physician to decide whether the hydrochloric acid should be administered before or after meals.

As regards the exhibition of alkalies, DR. SEE maintains that they often prove unsatisfactory owing to the fact that they are not given in sufficient quantity. Enough must be given to neutralize the excess of acid, and a quantity in excess of what is actually required may be given with benefit. A proper prescription, he says, would be from a drachm to a drachm and a half of sodium bicarbonate dissolved in water, to be taken between meals and continued for several days. DR. SEE very properly says that this mode of treatment is still under discussion. We believe more satisfactory results are to be derived from the use of acids before meals.

Evacuants are indicated in those forms of atonic dyspepsia in which there is accumulation of undigested matter in the alimentary canal. In cases of dilatation of the stomach *lavage*, or washing out of the organ is, of course, greatly to be preferred to emetics or cathartics. Dyspepsia is, however, not always gastric, but not infrequently exists chiefly in the intestines, and here the judicious use of purgatives is imperative.

The remarks of DR. SEE on the office of dietetics in the treatment of dyspepsia are very instructive. The routine employment of milk is roundly condemned. The only affections accompanied by dyspepsia in which he unconditionally recommends it, are diarrhœic complaints and gastric ulcer. His remarks on the amylaceous and the meat regimens are concise and we quote them in their entirety:

Amylaceous regimen.—In mucous dyspepsias and even in cancer where hydrochloric acid is totally lacking, it is useless and often dangerous to deprive the patient of food principles contained in the starches, and especially of such dietetic substances as are both amylaceous and nitrogenized. In conditions in which hydrochloric acid is in minimum proportion, the amylolytic period of digestion is predominant and rapid, and considerable absorbable maltose is formed with facility. In such cases soups with rice, etc., may be permitted, and also bread and biscuit; fat should be in sparing quantity, or withheld altogether; sometimes potatoes roasted in the ashes may be given, and pea soup or bean porridge.

Meat regimen.—A diet of starchy food ought to be rigorously interdicted in dyspepsias with hypersecretion of hydrochloric acid. Such articles of food are not transformed by the gastric juice; the excess of acid may determine spasm of the pylorus and retention of the amylaceous substances in the stomach, or exaggerated contractions of the muscles of the stomach, causing expulsion before the time, of the incompletely transformed or fermenting aliments. Fresh meat and fish are indicated in these cases, and the patient should virtually live on this diet—beef, mutton, fish, lean ham, in preference to fowl, game, or veal. As for *beverages* in dyspepsias, those with hyperacidity are the worse for wine, and tea should be used instead. While fermented liquors are to be avoided, whiskey and brandy in moderation seem to do no harm, except to occasion a slight retardation of the digestion. In dyspepsias with deficiency of gastric juice, on the other hand, wine is often an advantage by promoting an acid secretion.

THE EFFECTS OF INCREASED TEMPERATURE IN FEVER.

The activity of recent years in the matter of the introduction of agents calculated to reduce the temperature in fever, and the avidity with which these agents have been received, may be accepted as an index of the views of the profession on the question of the danger attendant on pyrexia, *per se*. The teaching of LIEBERMEISTER, that the chief danger is uncomplicated essential fever lies in the elevation of temperature, have dominated the profession for thirty years. It is true an occasional voice may be heard, declaring fever to be a thing not to be so much dreaded, and that to repress it in any other manner than by "opening the secretions," is to thwart nature in her efforts to rid the system of the materies morbi. Such voices are, however, generally regarded as coming down from the past and not entitled to a hearing in these days of advanced pathology. The profession is, therefore, under obligations to DR. WILLIAM H. WELCH, Professor of Pathology in Johns Hopkins University, for the study which he has given this subject in his recent Cartwright Lectures, delivered before the College of Physicians and Surgeons, New York.

DR. WELCH recognizes the fact that a reaction against the dicta of LIEBERMEISTER has set in, and in so far as his experiments on animals are reliable data on which to predicate the effects of prolonged elevation of temperature on man, this reaction would seem to be warranted. He asserts, as the result of a series of carefully conducted experiments that temperatures that are ranked as high febrile temperatures do not in themselves, independently of other factors, exert any such injurious influences as has been usually attributed to them. Among the other factors to which he alludes, he regards the infection as specially harmful.

The deleterious effects of long-continued high temperature are generally supposed to manifest themselves through a directly paralyzing influence on the heart, and the occurrence of parenchymatous or fatty degeneration of the heart-muscle. This view has been advocated with especial force by LIEBERMEISTER, who has

been generally followed therein by clinicians. DR. WELCH has, therefore, given especial attention to experiments intended to test the position. The results of these experiments show that while the cardiac muscle undergoes a certain amount of fatty degeneration, in no instance was such change accompanied by any appreciable diminution in the actual blood-pressure. Fatty degeneration as a result of the long-continued elevation of temperature in fever is, therefore, not the serious matter which parenchymatous degeneration is. Parenchymatous degeneration is, moreover, not prone to occur in such long-continued body heat, in DR. WELCH'S experience, and when fatty degeneration occurs it is not permanent, but commences to disappear soon after the temperature has been reduced. When, however, a morbific agent, as the bacillus of the swine plague, was injected into the rabbit in which the temperature had been artificially raised, the fatty degeneration was rapid and profound. When the bacilli were injected into rabbits in which the temperature had not been raised, no fatty degeneration ensued. The inference is, therefore, clear that while heat is *per se* not specially injurious to the heart muscle, it makes the action of the infection of this muscle quite virulent.

The experiments conducted with a view to determining the agency of heat in the production of the increase of waste of nitrogenous material which characterizes fever, were contradictory in their results. DR. WELCH'S experiments in this direction accord with those of previous experimenters, and the question must, therefore, be regarded as still *sub judice*.

THE PHYSICIAN'S FEE.

Though one give all his services to the poor and have not the knack of collecting his bill from those who are not poor, it profiteth him nothing. It would be an interesting study to determine how it is that ability to collect a bill goes hand in hand with therapeutic success, for certain it is that the best doctors are usually the best collectors. The Medical Record would improve the quality of the medical practitioner after the *vis a tergo* method, and lays down the following rules of procedure:

Always make a charge for each service. This gives it a business value in the eyes of the patient.

The charge should always be just and reasonable; then no deduction is necessary.

Insist always on full payment, based, if necessary, upon itemized accounts.

When the patient asks for a reduction of his bill, recall the sacrifice of sleep, of meals, and of comfort in rendering him prompt service. Think of your preferences then and of his now.

Never allow sentiment to interfere with business. The "thank you" is best emphasized by the silvery accent of clinking coin.

The loss of money by sickness only affects one side, in every other business. Why should it be different when the doctor is to be paid?

Always charge a fixed fee, and never trust to your patient's generosity or embarrass him by guessing an amount that would be satisfactory to you. It is very much like firing with a kicking gun at a black cat in the dark.

Render bills at short intervals, and be in earnest when you commence to collect them.

Notes.

A fire-eating doctor of Chicago (the anarchist hot-bed), regards with grave apprehensions the annual influx of 4,000 doctors. The diploma mills (medical colleges) of this country, he says, are rapidly reducing the profession to an army of genteel paupers, too proud to beg, too honest to steal, but too poor to exist. He regards it as unfortunate that the professors of these colleges cannot be imprisoned at hard labor, and that the colleges cannot be burned down. Unquestionably the evil complained of by this disciple of SPIES, FIELDEN, PARSONS & CO., is generally felt, but how the imprisonment of professors and the cremation of colleges is going to remedy it, only a bloodthirsty anarchist can perceive. Medical colleges do not create the demand for doctors, and their multiplicity merely has the effect of making smaller classes and thus ensuring better teaching. We venture, without fear of successful contradiction, the statement that the quality of the medical graduate is yearly improving. It is, of course, unfortunate that so many young men aspire to this life of drudgery and poor pay—chiefly unfortunate, however, because of the fact that they reduce the average income of those with whom they come in competition. The Chicago doctor has felt the evil of the growing competition and hence his characteristic howl. A more or less eminent Detroit doctor has evidently been touched in the same way, but his wail of complaint is confined to insinuations against men with whom he was himself formerly associated in professorial relations. Truly, this is a strange world!

A correspondent calls attention to a remarkable coincidence of views and forms of expression which he has detected in the article on "Alcohol in Health and Disease," in a recent issue of the AGE, and one on "Physiological and Therapeutic Effects of Alcoholic Stimulants," by DR. E. P. HURD, in the Therapeutic

Gazette of June, 1884. This coincidence is so remarkable and the paucity of quotation marks is so great, as to have suggested to our friend the suspicion of plagiarism. Now, it is not a pleasant thing to accuse a writer of thus appropriating another's thought and language, and when there is room for doubt the suspected party should be given the benefit thereof. We have heard much of late years on the subject of mental saturation and unconscious cerebration, and, perhaps, the coincidence referred to may be accounted for on this hypothesis. A man may read an article which may so impress itself on his mind that in after years, while the remembrance of the reading may have faded away, the indelible impression of the article itself may be bodied forth in very close semblance to the form in which it was originally created, and thus the unconscious imitation takes rank among the highest forms of flattery. Again, it must not be forgotten that in these latter days of much activity with the pen, the great minds behind the more powerful instrument than the sword, are extremely liable to unconsciously fall into the same channel. Therefore, brethren, it behooveth us to make liberal use of the divine mantel of charity.

A practitioner of this city recently had a private conversation with an intelligent patient on the question of the possibility of the accoucheur's conveying from patient to patient the germs of puerperal septicæmia. He expressed himself unequivocally to the effect that such a possibility existed, and that, unquestionably, the disease was sometimes so spread. The lady, doubtless believing she was discharging a duty, reported the conversation to one of the ubiquitous representatives of the press, who in turn gave it, with the usual embellishment, to his readers. The result has been a very considerable degree of excitement among the local profession, and maledictions deep, though not very loud, have been breathed against the doctor who was so derelict as to allow himself to be drawn into a conversation with a patient on such a delicate subject. This unfortunate has, of course, been in sack-cloth and ashes ever since, although, in his obstinacy, he abates not one jot or tittle of his declaration. Brethren, this excitement is very foolish. The truth, although it may be sometimes *de trop*, can never do harm, and those who flutter are very apt to be regarded by the world's people as having been wounded. Moreover, those who have not been touched display more egotism than good judgment, when they constitute themselves the champions of the profession. There has been no pressing demand for a champion in this instance.

The profession of this state, as well as the public of this city, will learn with mingled feelings of pain and pleasure that DR. A. B. LYONS, of this city, has received the appointment to a professorship in the Hawaiian Government College—pain because of the fact that the appointment will necessitate the removal from our midst of a gentleman whose distinction has been won by worth, pure and simple, and without the assistance of any of the tricks through which short-cuts are often made—and pleasure because of the recognition of merit so worthily bestowed. DR. LYONS' reputation as a chemist and general scholar is established on a foundation broad and deep, and the Hawaiian Government is certainly to be complimented on its selection. DR. LYONS' early days were spent on the Sandwich Islands and he will find his return to the home of his youth under these auspicious circumstances, peculiarly pleasant.

A correspondent, in a somewhat querulous spirit, mentions the fact that the physician to a certain county poor-house in an adjoining State performs the duties of his office, requiring daily calls at the institution, for the princely sum of one hundred dollars a year. He wants to know whether this is not degrading to the profession. We don't know, or, at least, we don't want to say it is. To answer the question in the affirmative would, by implication, accuse the score or more of reputable and eminent physicians in this city, and the hundreds of others in other cities, who perform similar duties for hospitals for much less than the sum named—who, in fact, in some instances, pay money for the privilege of donating their services.

The Medical Record says: "A new medical college has been established in Detroit, to be known as the Michigan College of Medicine and Surgery. It is only a short time ago that the two medical colleges formerly in existence there were united. But the union seems to have been rather conjugal than platonic, for as a result of the amalgamation we now have a new institution." Our distinguished contemporary then goes on to say something about the connection of the editor of the MEDICAL AGE with the institution. While our innate modesty prevents a reproduction of its remarks on this division of the subject, we cannot refrain from a cordial acknowledgment of the compliment. Thanks, brother.

DR. D. HAYES AGNEW, of Philadelphia, completed the fiftieth year of his life as a physician on the 6th inst., and his friends tendered him a jubilee banquet on the occasion. DR. J. M. DA COSTA delivered an eloquent and fitting address, and DRS. S. WEIR MITCHELL and THOMAS WISTAR contributed odes. The venerable recipient of the honors replied in a

speech which was rich in reminiscences from the past half century. It is given to very few to celebrate their golden weeding with the profession of their choice, and to fewer still to win the honor and distinction which have been DR. AGNEW'S.

MATTHEW ARNOLD, the apostle of sweetness and light, is dead. He has left behind him, in a poem called "The Wish," his conception of the pleasant death-bed, to which, it would seem, neither the doctor nor the priest is an essential:

> "Nor bring, to see me cease to live,
> Some doctor full of phrase and fame,
> To shake his sapient head, and give
> The ill he cannot cure a name.
>
> "Nor fetch, to take the accustomed toll
> Of the poor sinner bound to death,
> His brother doctor of the soul,
> To canvass with official breath."

The Medical World suggests the employment of the Greek letter "D" (Δ) instead of the ℥ sign in prescriptions, and thus obviate the liability to the error of mistaking the ℥ for the ℨ. Unquestionably, it would be very desirable to make the change for the reason given, but the necessity for caution would by no means be thus obviated, for it would be quite easy to so round off the angles of the Δ as to make it look like an "O." Why not employ the initial "D" for the drachm? Or, better still, write out the drachm, as also the ounce, grain, etc.

The practical deductions from DR. WELCH'S elaborate observations on the lower animals, would seem to make it apparent that the exhibition of our so-called antipyretics in large doses in fever, is of questionable utility. They are calculated to direct greater attention to the employment of agents which while facilitating the escape of heat from the body, at the same time open the excretories for the elimination of the materies morbi, which, rather than the heat itself, is the destructive factor in fevers.

St. Louis Medical and Surgical Journal: DR. P. G. UNNA, of Hamburg, announces that, commencing on April 1, he will give a half yearly course of instruction in histology, bacteriology, in the diagnosis and treatment of skin diseases. From our personal knowledge of DR. UNNA and of his well-attended clinics, we are sure that the same will be not only instructive but valuable.

The oil of peppermint, we are told, is death on cockroaches. Its vapor, diluted even to one part in a hundred thousand, throws the insect into fatal convulsions. The venerable roaches which are wont to feed on the paste-pot, may now be considered as relics of other days in the editorial sanctum.

The "boil in the ear," which the associated press despatches at first reported as ROSCOE CONKLING'S ailment, developed into suppuration of the mastoid cells, and in due time the process extended into the meninges of the brain, with fatal result.

A Michigan doctor paralyzed a company one very wet and slippery night by stating, in reply to the question whether he had come afoot, that he had not, but had adopted the same mode of locomotion that Baalam employed centuries ago.

The addition of gelatin to ordinary alcohol will, through its affinity for water and its insolubility in alcohol, remove the former and leave behind a nearly absolutely pure alcohol, thus obviating a resort to distillation in order to secure this product.

DR. C. R. AGNEW, the eminent ophthalmologist and aurist, of New York, was, while in attendance on ROSCOE CONKLING, seized with an attack of perityphlitis, to which he succumbed within a few hours of the decease of his illustrious patient.

A Western death-certificate mentioned as the cause of death, "calling Jim Bloodgo a liar."

Book Notices.

THE SURGICAL DISEASES OF THE GENITO-URINARY ORGANS, including Syphilis. By E. L. Keyes, A. M., M. D., Professor of Genito-urinary Surgery, Syphilology and Dermatology, in Bellevue Hospital Medical College; Consulting Surgeon to the Charity, the Bellevue and the Skin and Cancer Hospitals; Consulting Surgeon to the Bureau of Out-door relief, Bellevue Hospital; Surgeon to St. Elizabeth Hospital, etc. A Revision of Van Buren and Keyes' Text-Book upon the Same Subject.
New York: D. Appleton and Company.
Detroit: John Mac Farlane.

The original of this treatise was given forth in 1874, when it was very cordially received, and has ever since been a standard authority. In the several editions through which it passed it underwent few if any changes. The advances of the past fourteen years have, however, at last grown so great that no text-book which does not embody them can, notwithstanding its original merit, longer be regarded as a trustworthy guide. Lithotrity, suprapubic cystotomy, advances in the surgery of the kidney and in the treatment of varicocele, besides numerous minor advances which had no place in the original work, though it was fully abreast of the times when it was first issued, receive full consideration in this. The genius of VAN BUREN is thus supplemented by that of him on whom the mantel of the great master has fitly fallen, and the work again assumes

its original rank among the text-books on genito-urinary diseases. Further comment on a book so well known is quite unnecessary.

Atlas of Venereal and Skin Diseases, Comprising Original Illustrations and Selections from the Plates of Prof. M. Kaposi, of Vienna; Dr. J. Hutchinson, of London; Prof. I. Neumann, of Vienna; Profs. A. Fournier and A. Hardy, and Drs. Ricord, Cullerrier, Besnier, and Vidal, of Paris; Prof. Leloir, of Lille; Dr. P. A. Morrow, of New York; Dr. E. L. Keyes, of New York; Dr. Fessenden N. Otis, of New York; Dr. J. Nevins Hyde, of Chicago; Dr. Henry G. Piffard, of New York, and others. With Original Text by Prince A. Morrow, A. M., M. D., Clinical Professor of Venereal Diseases, Formerly Clinical Lecturer on Dermatology, in the University of the City of New York; Surgeon to Charity Hospital, etc.
New York: William Wood & Company.

Human powers of word painting are limited, and the most skillful manipulator of words would fail to create a correct conception of the rose in the mind of one who had never seen the flower. So it is also in the case of eruptions which attack the human skin. Dermatology can be successfully studied only through the sense of seeing. The most elaborate of the excellent treatises on the subject, which various publishers have given the profession, are very unsatisfactory when they do not contain artistic representations of the various affections discussed. The atlas of skin diseases is, therefore, a necessity, and enterprising publishers vie with each other in securing artists who can most successfully give to the paper the counterfeit presentment of the eruptions. The lithographer's art has enabled them to do really marvelous things in this direction, and in the productions before us we have life size representations on which it would seem that even nature could not improve. The descriptive text is also very complete, and read in connection with the plates gives the student about as perfect a substitute for the regular clinical lecture as could be conceived. The work which is now coming out in parts (of which there are to be fifteen, of imperial folio size) will contain seventy-five of the plates which we have described, embracing several hundred figures.

The Hygiene of the Skin, or the Art of Preventing Skin Diseases. By A. Ravogli, M. D. 8 vo.: pp. 400; $3.00.
Cincinnati: Central Medical Publishing Co.

The name of the author of this book is not familiar, and inasmuch as he appends to it no titles save that of his doctorate, we have no further guarantee than the book itself of his fitness to write as a teacher on the subject. One is naturally puzzled to conceive what can be said on the subject of hygiene of the skin to fill a volume of this size. An examination, however, shows that the author does not stick very closely to his text but devotes a very large proportion of his space to the anatomy of the skin and the diagnosis and treatment of the diseases thereof, and nearly a hundred pages to the consideration of the hair and parasites. Such of our readers as buy the book must, therefore, expect in addition to a discussion of the hygiene of the skin, a tolerably complete work on the diseases thereof. They will, moreover, find it one whose study will amply repay them for the investment, for the author has evidently had large experience and speaks with an assurance born of a thorough understanding of his subject. The literary style is pleasing and the publishers have given us a very excellent specimen of the book-maker's art, the paper, letterpress and binding being of a very superior order.

Diseases of the Heart and Circulation in Infancy and Adolescence. By John M. Keating, M. D., Obstetrician to the Philadelphia Hospital, and Lecturer on Diseases of Women and Children; Surgeon to the Maternity Hospital; Physician to St. Joseph's Hospital; Fellow of the College of Physicians of Philadelphia, etc.; and William A. Edwards, M. D., Instructor in Clinical Medicine and Physician to the Medical Dispensary in the University of Pennsylvania; Physician to St. Joseph's Hospital; Fellow of the College of Physicians; Formerly Assistant Pathologist of the Philadelphia Hospital, etc. Illustrated with photographs and wood engravings.
Philadelphia: P. Blakiston, Son & Co.
Detroit: John Macfarlane.

The purpose of this work is to supply a deficiency which is apparent in all the treatises or pædiatrics, on the subject of diseases of the heart and circulation. The plan adopted has been to collate from periodical literature, monographs, lectures, etc. all the matter of importance bearing on the subject. This has been carefully edited and presented with a uniformity of style throughout. The experience of the authors as editors of the Archives of Pædiatrics has been of invaluable aid to them in the preparation of this treatise, which is one which no one who realizes the importance of the diseases of which it treats, especially in children, can afford not to be possessed of. The plan of the work is the correct one, viz: the supplementing of the observations of the better class of practitioners by the experience of those who have given the subject systematic attention.

Fever Nursing: Designed for the Use of Professional and other Nurses, and Especially as a Text-book for Nurses in Training. By J. J. Wilson, A.M., M.D., Author of "A Treatise on the Continued Fevers;" Visiting Physician to the Philadelphia Hospital and to the Hospital of Jefferson College; Fellow of the College of Physicians, Philadelphia; etc.
Philadelphia: J. B. Lippincott & Co.

The title of this little work is explanatory of its purpose. Of the necessity of such a work there is no doubt, and we are glad to find the attention of "nurses in training" especially

called to it. The "trained nurse," so-called, is an innovation and is as yet something of an experiment. From our experience with the personage we are satisfied that no amount of training can make a good nurse out of an indifferent piece of material, and it too often happens that it is just this kind of material which is attracted to the "profession" of nursing. Such persons are peculiarly in need of the sound advice and reliable instruction which DR. WILSON gives in his little book, which is one to be cordially commended to those for whom it is designed.

ON A NEW TREATMENT OF CHRONIC METRITIS, and Especially of Endometritis, with Intra-uterine Chemical Galvano-Cauterizations. By DR. GEORGES APOSTOLI, Free Professor of Electro-Therapeutics at the Practical School; Member of the Society of Medicine of Paris, and of the Society of Practical Medicine, etc. With nine figures in the text. Translated by A. LAPTHORN SMITH, B.A., M.D., Member of the Royal College of Surgeons of England; Fellow of the Obstetrical Society of London; Lecturer on Gynecology in Bishop's University, Montreal, etc.
Detroit: George S. Davis.

APOSTOLI'S method promptly attracted attention on its introduction, and the profession of this country will be pleased to learn more fully of it, in the author's own words, than they have heretofore been able through the synopses which have from time to time appeared in the journals. In the brochure before us the apparatus is described in detail and the *modus operandi* so fully discussed as to enable the veriest tyro to apply the treatment. The treatment is, moreover, one which all who have experienced the unsatisfactory results from the ordinary methods, will be glad to become familiar with.

THE YEAR-BOOK OF TREATMENT FOR 1887. A Critical Review for Practitioners of Medicine and Surgery.
Philadelphia: LEA BROTHERS & Co.
Detroit: JOHN MACFARLANE.

The list of contributors to this issue of the year-book embraces names of prominent English physicians only. It is a little singular that none of the contributions to the advancement of therapeutics by the profession of this country during the past year, have been deemed worthy of a place in a volume which purports to give a resumé of the progress for that period. This does not, however, prevent the book from being valuable, and it will be appreciated as a remembrancer even by those who have made it a point to read carefully the leading periodicals of the day.

MODERN TREATMENT OF HEADACHES. By Allan McLane Hamilton, M. D.
Detroit: George S. Davis.

This number of the Physician's Leisure Library Series is a valuable contribution to medical literature, which is by no means replete with excellent treatises on the subject of headaches, a class of ailments which are proverbially unsatisfactory as regards their therapeutics. The author recognizes the following forms of headache: 1, congestive; 2, anæmic; 3, organic; 4, toxic; 5, neuralgic; and 6, neurasthenic. The work is devoted to the etiology, diagnosis and treatment of these, and, it is needless to say of a work by DR. HAMILTON, the consideration which they receive while concise, to accommodate the dimensions of the book, is at the same time comprehensive. The number is one of the most important, from a practical point of view, in the excellent series of which it forms a part.

OBSTETRIC SYNOPSIS. By John S. Stewart, M. D., Demonstrator of Obstetrics, and Chief Assistant in the Gynæcological Clinic of the Medico-Chirurgical College of Philadelphia. Illustrated.
Philadelphia: F. A. Davis, Publisher.

The *raison d'être* of this little book lies in the necessity of the student, who, the author is convinced, has not time to make a systematic study of the elaborate works. He has, therefore made this study for the young man, and has made such selections as he has deemed best suited to the adolescent mind. The only justification for such synopses lies in the excellence of the achievement, and DR. STEWART has shown himself an adept at the art of condensing.

QUESTIONS AND ANSWERS ON THE ESSENTIALS OF PHYSIOLOGY. Prepared for Students of Medicine. By H. A. Hare, B. Sc., M. D. (Univ. of Pa.) Demonstrator of Therapeutics and Instructor in Physical Diagnosis in the Medical Department, and Instructor in Physiology in the Biological Department of the University of Pennsylvania, etc. With Illustrations.
Philadelphia: W. B Saunders.

This little book contains about every conceivable question which would be asked the student in the quiz class, and he who will possess himself of the answers thereto need have little fear in going before any board of examiners on physiology. This method of asking and concisely answering questions is, moreover, valuable by way of actual instruction.

THE TREATMENT OF HEMORRHOIDS BY INJECTIONS OF CARBOLIC ACID AND OTHER SUBSTANCES. By Silas T. Yount, M. D., Physician to St. Elizabeth's Hospital, Member of the American Medical Association, etc. Second Edition.
Lafayette, Indiana: The Echo Music Co., Printers.

DR. YOUNT has shown himself in this brochure to be thoroughly conversant with the method of treating piles which he recommends, and he has succeeded in expressing himself clearly and forcibly. Although much has been written on carbolic acid injections, during the past five years particularly, no one who reads DR. YOUNT'S practical remarks can fail to do so with profit.

Medical Progress.

HYPODERMIC MEDICATION.—A physician without his instruments is as a lawyer without his witnesses, or a carpenter without his tools. A pocket case, a metal catheter, a fever thermometer and a hypodermic syringe are essentials to successful practice, and no physician who does his whole duty by his patrons ever makes a call without them. The hypodermic syringe is an instrument for emergencies and with cannot dispense with it since we have no substitute for it.

So long and so universally has this method of medication been used, and so generally is it understood, that we should hesitate to add any suggestions or precautions, were it not that it is often beneficial to rehearse lessons that have been learned long ago. The daily prompt and beneficial results attained by its use, have created a tendency on the part of physicians to disregard the dangers that may accrue. In a leading article on this subject the Therapeutic Gazette says:

"As is well known, the objections to the method are twofold: first, the danger of the production of local inflammation and abscesses; secondly, the possibility of throwing the whole mass directly into a vein and having it swept in concentrated form into the heart or a nerve-centre. The last of these two dangers is a remote one, and yet we have seen in the injection of a sixth of a grain of morphine followed within a minute by a complete unconsciousness and collapse, with arrest of respiration, dropping of the jaw, and apparent death, a condition from which the patient was rescued only by the most strenuous efforts. The danger of such an accident can be greatly lessened by withdrawing the point of the needle a little after it has been plunged into the tissue.

It is especially in the production of local irritation that the danger of the hypodermic syringe lies. Not only have abscesses been frequently produced, but in not a few cases fatal tetanus has resulted from the administration of an irritant substance. There can be no doubt that this difficulty can be largely overcome by certain precautions which are frequently neglected by medical practitioners. In the first place, only under urgent circumstances is the doctor justified in using hypodermically substances which are very irritant, such as sulphate of quinine. When, however, any such substance is employed, it is of the utmost importance to see that every particle of it is dissolved, and if the substance be of such nature that it is precipitated by alkalies, an acid should be present in the solution in water to prevent the precipitation by the juices of the cellular tissues. An irritant substance which is rapidly dissolved and taken up from the part may produce at first smarting and pain, but ought not to make any permanent irritation. To prevent any possibility of the injection of minute solid particles, the hypodermic solution should always be filtered."

In the absorbing interest of the physician in the disease he is treating, idiosyncracy of his patient may be lost sight of. We have seen one-sixtieth of a grain of pilocarpine used hypodermically produce very profuse perspiration in one case, while in another one-eighth of a grain produced only a moderate flushing of the surface. Idiosyncrasy in regard to morphia should always be remembered. The inflammation that often arises at the site of the introduction of the drug used is due either to some foreign substance deposited in the tissues by the needle or to the irritant quality of the drug.

Abscess cavities formed in this way, as a rule heal very slowly.

The fact that the hypodermic use of morphia is so seldom followed by abscess, is probably due to its local anodyne and sedative effect. If this be true, a rational practice would be to add some local sedative that is not incompatible with the drug used. The Gazette recommends, that one drop of carbolic acid and one or two drops of glycerin be added to every fifteen minims of the solution used, the physician keeping in mind, however, that some alkaloids are thrown out of their solution by the addition of too much glycerin. Carbolic acid acts as a sedative.

It is thought by some that solutions are absorbed more readily when injected into the subcutaneous tissue, than when thrown into muscular tissue. This is a mooted question.

When the needle is held perpendicular to the surface and plunged through the skin into muscular tissue, the patient scarcely feels its introduction. This method is attended with more danger than that of simply introducing the needle under the skin. An artery may be wounded, or in careless hands the point of the needle may be broken off in a bone.

In hyperemia, or in beginning atrophy of the optic nerve, it is often desirable to continue daily injections of strychnia for some weeks. These almost invariably produce inflammatory exudation forming hard knots, varying in size from that of a hazel-nut to that of a walnut. These nuts are persistent, in some cases painful and if there be many of them they interfere with the action of the muscles in which they are located.

Since the promulgation of the germ theory of disease, attention has been specially called to the spoiling of liquids that are kept for some length of time for hypodermic use.

Often a month or more passes by in the work of a general practitioner in which he has no occasion to use the hypodermic syringe.

There has as yet been no practical means devised by which solutions may be kept perfectly pure and of original strength for any length of time. Either evaporation takes place or a fungous growth appears in the liquid. Large drug houses have overcome this difficulty by making readily soluble tablets of definite strength that may be kept with security. These are of great advantage to the country practitioner who, without them, often has to guess at the dose he uses.

SEA-SICKNESS.—It is strange that during the ages in which man has suffered from sea-sickness no one has succeeded in finding a remedy for the malady, or, indeed, in solving satisfactorily the riddle of what it really is. Many, it is true, have been the explanations offered of the nature of the trouble, and specifics without number have been vaunted for the relief of its victims; but still those "who go down to the

sea in ships" suffer just as did their fathers before them.

At a meeting of the Academy of Medicine of Paris, held on January 10, 1888, M. OSSIAN-BONNET read an interesting paper on the subject, in which he settled, satisfactorily to himself at least, the question both of the pathogenesis and of the treatment of sea-sickness. He holds that the affection is purely nervous, and rejects the mechanical theories of its nature as unsound and leading to useless, or even harmful, methods of treatment. The one constant and essential symptom of naupathia, to use the author's favorite term, is not nausea, but vertigo. It is true that nausea and vomiting are exceedingly frequent accompaniments of the vertigo, yet they are not essential symptoms of sea-sickness, and may even be due to causes independent of those producing the latter. Thus, the vomiting which is so common during the first few days of a sea-voyage is apt to be chargeable to indiscretions in eating and drinking just before sailing as to to any motion of the vessel.

The chief cause of this vertigo, the author believes, the motion of the ship. Yet not every motion is equally liable to cause the affection. Many persons are not sick during the rolling of the vessel, but suffer extremely when the ship begins to pitch. This is due to the giddiness caused by the sudden descent of the boat into the hollow of the wave. The same sensation is noticed by many persons while in an elevator that is descending rapidly; it is a feeling of "goneness" at the pit of the stomach, and this causes dizziness. The vertigo may also be excited by the apparent instability of surrounding objects, as sometimes is noticed on land in those riding in a merry-go-round. In short, the author's belief is that sea-sickness is a purely nervous affection, and that it is not to be explained by succussion of the brain or the cephalo-rachidian fluid, by movements of the abdominal viscera, or by any other mechanical condition.

The treatment which M. OSSIAN-BONNET found eminently successful was based upon this view as to the nervous pathogenesis of the trouble. In order to prevent the acute indigestion from which many suffer, he advises the use of some saline laxative every morning for two or three days preceding the setting sail. If there is vomiting after the voyage is begun, he recommends the sufferer to take half a glass of water after each attack. By this means *lavage* of the stomach is accomplished, and the act of vomiting is made less painful by reason of the water, which prevents the distressing contractions occurring when the organ is empty. But the remedy which the author has found to be a true curative agent, never having failed him in nearly sixty consecutive cases, is antipyrine. He was struck with the action of the drug in diminishing the excito-motor power of the cord, and was led to believe that it would be useful in controlling sea-sickness, which he had come to regard as a purely nervous affection. In order to test the remedy he made a voyage from Havre to Buenos Ayres and return, and the results of his experiments fully answered his expectations. In no case did the remedy fail, and in several instances of confirmed sea-sickness a cure was obtained after cocaine, morphine, atropine, and other drugs had given no relief. In most cases a dose of from twenty to twenty-five grains was sufficient, but in some it was necessary to repeat the dose, or to give the remedy in larger amounts. When vomiting was persistent it was necessary to give the first dose subcutaneously, a second dose, if one were needed, being administered by the mouth.

M. OSSIAN-BONNET was fully persuaded that he had at last found a genuine remedy for this troublesome malady, but others before him have expressed themselves with equal confidence, and further trials of their supposed specifics have caused disappointment. It seems to be the fashion now to ascribe almost miraculous powers to antipyrine, but it is not a cure-all. Its power to relieve headache is undoubted, yet it often fails in this respect, even in cases which are supposed to be of just the kind to be most benefited by it. And doubtless the experience with the drug in sea-sickness will be of much the same character: it will relieve in many cases, and will fail to relieve in others. But even if it gives relief to but a few, it will be a boon to those, and would seem, at all events, to be worth trying.—*Medical Record*, March 27, 1888.

CASE OF CHRONIC CYSTITIS CURED BY FLUID EXTRACT OF PICHI.—*History.*—Patient was a white man, æt. 20, with good family history. He had an attack of acute gonorrhœa nine months since. The inflammatory action extended to the bladder, in spite of his physician's treatment. He was relieved of the cystitis at that time, but the gonorrhœal discharge continued in spite of all treatment.

Symptoms.—The usual signs of vesical catarrh were present: Frequent micturition with the passage of only a small quantity of urine, and dull, aching pain over the vesical region. The urine was alkaline in reaction, and on settling, divided, as so tersely described by Prof. Loomis, "into two parts—a lower, thick, turbid, gelatinous, coherent and opaque mass—the supernatant layer being clear."

Treatment.—The diet was restricted so far as to exclude all stimulating food and any excess of fat. Washing out the bladder could not, for sufficient reasons, be resorted to. At the beginning of the treatment, the following prescriptions were given:

℞ Tinct. ferri. chlorid., ʒ iss.
Tinct. cantharidis, ʒ j.
Olei. copaibæ, ʒ iss.

M. Sig.—Teaspoonful three times a day.

For the gleet:

℞ Zinci sulpho-carbolatis, gr. x.
Ext. hydrastis canadensis (colorless) fluid, ʒ ij.
Atropiæ sulphatis, gr. ij.
Aquæ destillatæ, q. s. ad. ʒ iv.

M. Sig.—Inject morning and night.

This treatment was persevered in for a sufficient length of time, with only an amelioration of symptoms during the continuance of the remedies.

Dr. Loomis says, in the last edition of his ex-

cellent work on Practice of Medicine, "I have found more benefit from the daily use (drachm doses after each meal) of the 'Lafayette mixture' in chronic cystitis than from any other remedies." Having had some experience with this combination in hospital practice, and from its being recommended by such an eminent authority, I was induced to give it a trial; but no permanent benefit followed its use.

Other remedies, such as the fluid extract of eucalyptus, belladonna, buchu, *et cætera*, were used, but all with signal failure.

As a dernier resort, and with little expectation of benefit, the following were given:

℞ Ext. pichi fld. (Parke, Davis & Co.'s), ℥ ij.

Sig.—Twenty drops three times daily for three days, then thirty drops *ter die*.

For the gleet, which had never ceased:

℞ Normal liquid ergot (P., D. & Co.'s), ℥ ij.
Aquæ destillat, q. s. ad. ℥ ij.

M. Sig.—Inject morning and night.

The patient was to report at the end of a week.

The urine, examined at the end of this time, was a trifle clearer, and the gleet was decidedly lessened in quantity. The pichi was continued in gradually increasing doses, till fifty (50) drops *ter die* were reached, and it was then gradually lessened. The urine, at this time, was clear and cloudless. All treatment was finally stopped, for the purpose of determining whether these effects were merely temporary or permanent.

The patient reported every week, and up to this time there has not been the slightest return of the symptoms, and I think I can safely say that he is cured.—RAMON D. GARCIN, M. D., in *Va. Med. Mo.*, March, 1888.

THE SWEDISH GYMNASTIC TREATMENT OF PROLAPSE OF THE UTERUS.—Twenty years ago a Swedish layman, MAJOR BRANDT, of Stockholm, published a little work entitled "Nouvelle méthode gymnastique et magnétique pour le traitement des maladies des organes du bassin et principalements des affections utérines." The book is to be found in the library of the Surgeon-General's office at Washington. Whatever may be thought of the major's theoretical views, and particularly of his ideas as to the "magnetic" element in the *modus operandi* of his method, it is interesting to note that his treatment of uterine prolapse has in a number of well-attested cases been attended with marked success. An interesting communication on the subject is published in the "Centralblatt für Gynäkologie" for March 32st, by PROFESSOR VON PREUSCHEN, of Griefswald, who says that, having spent some time in Stockholm observing the application of ARANDT'S method and the results following its use, he resolved to make further use of it in his own practice. This he has done, and in the article mentioned he gives the history of a case of complete procidentia in which he produced with it a cure that he thinks will prove permanent.

BRANDT'S treatment of prolapsus consists essentially in methodically lifting the uterus by manual force applied through the abdominal wall: in making the patient exert herself to the utmost in contracting the adductor muscles of her thighs; and administering sharp taps with the edge of the hand upon the lumbar vertebræ and the sacrum. The patient lying in lithotomy posture, an assistant introduces one finger into the vagina and presses the cervix backward so as to throw the uterus into an attitude of anteversion; the operator stands at the patient's side, her face toward her head, and presses both his hands, forcibly supinated, deep into the pelvis immediately above the pubic bones; still keeping his hands buried deep, he carries them slowly upward toward the epigastrium. By the aid of the assistant's co-operation, whose duty it is to follow the uterus with his finger in the vagina and maintain it in a state of anteversion, this lifts the organ as high as it can be made to go. The operator then removes his hands, and the uterus slowly falls back to its former position. The manipulation is repeated about three times on each occasion.

The exercise of the thighs consist in their forcible separation by the operator, whom the patient is to resist with all her power. This calls into play, according to VON PREUSCHEN, not only the femoral adductors, but also the muscles forming the floor of the pelvis, the so-called pelvic diaphragm, especially the levator ani; and it seems to be about the only way in which forcible voluntary contraction of the muscle can be brought about without at the same time calling the abdominal muscles into play to a degree that would prove injurious under the circumstances. Doubtless this exercise results in heightened tonicity of the levator ani, which tends not only to close the vagina, but also to produce a favorable change in the direction of a portion of that canal, so that the pelvic floor is decidedly strengthened as a support to the pelvic contents. As to the action of the taps on the rump—a point that VON PREUSCHEN says hardly anything about—it may be partly by stimulation of motor nerves.

There seems to be nothing severe or objectionable in the judicious employment of such measures, and, even if they should fail in accomplishing the cure of a prolapsus, their effect would undoubtedly be of benefit to the patient's general health.—*N. Y. Med. Journal*, April 14, 1888.

SULPHUROUS ACID IN THE TREATMENT OF PULMONARY CONSUMPTION.—The French seem determined to introduce this substance in some form into the body to cure pulmonary consumption. DR. DARIEN (Buletin Général de Thérapeutique, t. cxi., 14) gives the history of the treatment with sulphurous acid. It had been used as far back as the second century. DR. SOLLAND came upon this treatment accidentally in the following way: It seems that a sergeant having phthisis had been through different kinds of treatment, and was finally sent to the East without improvement. Nothing could stay the march of the malady, and weary of continued hospital treatment, he demanded his release and left. Wishing some light employment, he was given the

work of opening the doors of the rooms of the barracks where sulphur was burned for disinfecting purposes. To do this he was obliged to pass nine hours of his time each day in a sulphurous atmosphere. In sixty-five days he had completely recovered. A case of chronic bronchitis also recovered after inhaling for fifteen days. M. AURIOL was led to its use in phthisis from these facts. He found in a factory at Bellegarde, in a room where sulphur was used, a number of consumptive women who refused to work elsewhere, because they always felt better in this room.

He had a large and closed room fitted up; in one corner he had a small brazier in which was sulphur slightly moistened with alcohol, and in the other corner the patient was placed, standing erect and taking deep respirations. Soon the effects of the sulphur were felt, and then the patient continued inhaling until chemically prepared paper in the room showed the lead reaction. At times, when the fumes of the sulphur were too strong, the windows were opened for a short time. To make the inhalations less irritating, a little benzoin or powdered opium may be added to the sulphur. In a little while the patient becomes accustomed to the fumes. These inhalations were practised in the morning and evening, on an empty stomach, and were followed up by exercise in the open air. Medicated inhalations were also used. Sixty-six tuberculous patients were treated in this way, in all of which an examination of the sputa showed the presence of the tubercle bacilli. Thirty of these, who were very ill, had their disease arrested so that the sweats and fever disappeared, the appetite and weight increased, and the bacilli disappeared. The lungs cleared up, and the caseous deposits became fibrous and innocuous. This state of things continued for a year and, no bad symptoms returning, they were considered cured. Many of the others were so far advanced in the disease, and took the treatment so irregularly, that they did not show the same improvement.

M. DUJARDIN-BEAUMETZ feeling convinced that there is something in this method of treatment, has fitted up a room in the manner above described, and makes the patients inhale the sulphurous fumes, letting in air from time to time to make it more bearable. In using the fumigation, a lamp or sulphurous candle is employed. The lamp increases the amount CO_2 in the room, but M. DUJARDIN-BEAUMETZ thinks this causes the gases to be taken up more quickly. In the small number of patients treated (only seven), he has had excellent results, and he expects to make another report when a larger experience justifies it.

His conclusions are that it is not as good as the iodide of potassium in syphilis, but he thinks it is a cure for many cases. It is not only effective in stopping the trouble, but it acts well in ameliorating the bad symptoms when a cure is not possible. The French are so intensely enthusiastic over everything that seems to promise good results, that they are apt to rush into print before their theories are fully justified by facts. This treatment can, of course, only be carried on in hospitals, and it is to be hoped that equally good reports may be heard later, and that it may not share the fate of the rectal injection treatment.—*N. Y. Med. Record.*

ANTHRAROBIN—ITS CHEMISTRY AND APPLICATION IN SKIN DISEASES.—A short time since Prof. Liebermann attempted to obtain chrysarobin by the reduction of chrysophanic acid, but failed, the reduction going somewhat differently, and yielding a product in which two atoms of hydrogen had simply replaced one atom of oxygen. The empirical relation between the compound obtained and the chrysophanic acid and chrysarobin may be represented thus:

Two mols. of chrysophanic acid ($C_{15}H_{10}O_4$)= $C_{30}H_{20}O_8$.

One mol. of chrysarobin= $C_{30}H_{22}O_8$.

Two mols. of the new product ($C_{15}H_{12}O_4$)= $C_{30}H_{24}O_8$.

Like chrysarobin, the new compound was found to absorb oxygen readily when in alkaline solution, chrysophanic acid being reformed. This investigation was only a portion of a larger one, having for its object the study of the "leuco" bodies that might be obtainable by reduction of coloring substances of the anthraquinone group, in the course of which it was found that alizarin, flavopurpurin, anthrapurpurin, anthragallol, and other allied compounds yield similar reduction products, all of which are readily reconvertible into the original substance by atmospheric oxidation when in solution. Prof. Liebermann, following up his idea as to the mode of action of chrysarobin, therefore prepared for therapeutic test a quantity of the reduction products of alizarin and flavopurpurin, these being selected as low-priced materials. So far as the products have been tried in cases of herpes tonsurans, pityriasis versicolor, eczema marginatum, and psoriasis, the results seem to have been fairly satisfactory, Dr. Behrend reporting that the alizarin product is effective in all cases relieved by chrysarobin, to which, however, its action is somewhat inferior, although more intense than that of pyrogallic acid. These compounds are, therefore, being sent into commerce under the name "anthrarobin," the purpurin product being distinguished from the alizarin product by the letter P or F. The method of preparation consists in boiling commercial alizarin or purpurin with zinc dust and dilute ammonia solution, filtering off the ammoniacal solution into hydrochloric acid, and collecting, washing and drying the precipitate. The product is said to be sufficiently pure for medical purposes without further treatment. Anthrarobin is described as a yellowish-white powder, fairly stable when exposed to the air in the dry condition. It is insoluble in water and aqueous acids, but freely soluble in the cold in dilute aqueous solutions of the alkalies, ammonia, and the alkaline earths, with a brown yellow color, such solutions absorbing oxygen from the air with avidity, and passing through green to blue, then to alizarin violet. It is soluble with difficulty in benzol or chloroform, but it is much more soluble than chrysarobin in glacial acetic acid, and especially in alcohol (1 in 5 in 90 to 95 per cent. alcohol). An alcoholic solution oxidizes if exposed to air, but may be kept unaltered for a week in a well-corked bottle; it can be diluted with glycerin, in which also anthrarobin is soluble. The commercial article yields $\frac{1}{2}$ per cent. of zinc ash. According to Dr. Behrend, anthrarobin has the advantage over chrysarobin of producing no

inflammation of the cuticle. It colors the skin a slight brown, but the stains it produces on linen can be removed with soap and soda.—*The London Pharmaceutical Journal and Transactions*, March 3; *Medical Register*, April 14, 1888.

TREATMENT OF GONORRHŒA BY ANTHROPHORES.—Dr. Hugo Lohnstein, of Professor Zuelzer's polyclinic in Berlin, has found, as the result of observations on ninety-three cases, that gonorrhœa, both in its acute and chronic form, usually yields more readily to systematic treatment by a kind of medicated soluble bougies called "anthropbores" than to other methods. These anthrophores are made by Herr Stephan, a pharmacist in Treuen, Saxony, and consist of a nickel-plated metallic spiral containing a soft medicated material, the basis of which is gelatin and glycerin—the same kind of thing, in fact, as the kektograph and other "graph" compositions are made of. Before the introduction of the bougie the urethra is well syringed out by a Zuelzer's apparatus with a 2-per-cent. solution of boracic acid. Regarding this Dr. Lohnstein remarks that the mere passing of urine by the patient is quite insufficient to cleanse the passage from secretion, as anyone may easily convince himself by an examination with the endoscope. As a rule, a single bougie is sufficient during twenty-four hours. Indeed, when the introduction was repeated several times a day no better result was obtained, but, on the contrary, the urethra appeared to be irritated by the instrument. These bougies must be differently applied in acute and chronic cases. In an acute gonorrhœa, where the prostatic portion of the urethra is not affected, the bougie should not be introduced into it, the surgeon being able to tell when the prostate is reached by the greater resistance caused by the circular muscular fibres. In chronic gleet, where the prostatic portion is affected, the bougie should be made to enter it, but ought always to be kept from entering the bladder, which may bring on strangury and even cystitis. The surgeon guards against this by asking the patient to tell him when he feels as if the instrument were in the bowel. He then knows that is in the prostatic portion. The medicament mostly used by Dr. Lohnstein is thallin. For the first and second day bougies containing 2 per cent. of this substance are employed; even this strength occasionally produces a sensation of burning. On the third and subsequent days a bougie with 5 per cent. of thallin can usually be borne. It is not found advisable to allow patients to introduce the bougies themselves, for they are liable to set up hemorrhage and to push the instrument into the bladder. In an acute case the thick secretion is usually changed by the second or third day into a thinner and clearer fluid; during the next few days the quantity of this gradually diminishes, and the secretion has generally entirely ceased in from eight to fourteen days' treatment. Complications such as are produced by injections very rarely occurred; epididymitis never; cystitis in two cases only, and in these it was probably due to faulty introduction of the bougies. Several cases were cured that had resisted other measures. The most difficult class of cases to treat is, of course, the chronic form. Here it was often found that though the secretion could be greatly reduced, any attempt to lengthen the intervals of the introduction of the bougies was liable to be followed by a return to the original condition. When the prostate and its ejaculatory ducts are affected, it is often necessary to have recourse to bougies of kinds—e. g., zinc, ichthyolate of ammonium. Of course, where, instead of the mucous membrane generally being inflamed, there is a small ulcerated patch, these bougies are useless, and the endoscope must be employed as a guide to special local treatment. —*Lancet*, March 27, 1888.

SYRUP OF TAR IN WINTER COUGH.—DR. WILLIAM MURRELL, of London, England, writes as follows of the syrup of tar in winter cough, in the British Medical Journal, March 2: "Tar is undoubtedly one of the best remedies for chronic bronchitis and winter cough but the difficulty is to know how to give it. In an article which appeared in the Journal in 1875, I recommended that it should be given either in capsules or in pills made with lycopodium. Both these methods have their disadvantages, and now I use the syrupus picis liquidæ of the 'United States Pharmacopœia,' prepared as follows:

Tar, 6 parts,
Cold water, 12 parts,
Boiling distilled water, 50 parts,
Sugar in coarse powder, 60 parts,
To make 100 parts.

Upon the tar, contained in a suitable vessel, pour the cold water, and stir the mixture frequently during twenty-four hours; then pour off the water and throw it away. Pour the boiling distilled water upon the residue, stir the mixture briskly for fifteen minutes, and set it aside for thirty-six hours, stirring occasionally. Decant the solution and filter. Lastly, in forty parts of the filtered solution dissolve the sugar by agitation, without heat.

"It is stated in most of the dispensatories that the syrup contains six grains in the drachm, but MR. TANNER, of the Westminster Hospital, tells me that, in reality it is not much stronger than the old-fashioned tar-water. This, however, is a matter of little importance, for, by the addition of a few drops of ammonia, or other alkali, it can be prepared of almost any desired strength. I usually give it in doses of from two to four drachms every three hours or even oftener. It is by no means disagreeable to take, but, should the taste be objected to, it can be flavored with syrup of Virginian prune, made according to the following formula:

Wild cherry, in No. 20 powder 12 parts,
Sugar, in coarse powder, 60 parts,
Water, a sufficient quantity to make 100 parts.

Moisten the wild cherry thoroughly with water, and macerate for twenty-four hours in a close vessel; then pack it firmly in a cylindrical glass percolator, and gradually pour water upon it until thirty-five parts of the percolate are obtained. Dissolve the sugar in the liquid by agitation without heat, add glycerin, and strain. The tar is an excellent stimulating expectorant, whilst the wild cherry is not without influence

in allaying cough. The efficacy of the combination may be greatly increased by the addition of a little apomorphine. I use the 2 per cent. solution of the 'British Pharmacopœia,' and find that six minims may be given frequently without exciting nausea. Many patients take ten minims perfectly well; but in a few cases in delicate women especially, it induces vomiting. During the last two years I have used this method of treatment in nearly a hundred cases of chronic bronchitis and winter cough, and have every reason to be satisfied with the result. The cough is relieved expectoration is rendered easier, and the patient usually sleeps well the very first night. The syrup of tar alone, without the apomorphine, is admirably adapted to the treatment of the coughs and colds of children, and has none of the disadvantages of preparations containing opiates."—*Med. Register*, April 1, 1888.

SALICYLATE OF MERCURY IN SYPHILIS.—There is probably no disease which responds quicker to treatment than syphilis in most of its forms. In the earlier stages, particularly, mercury, as a salt, has generally been very effective. Of late, salicylic acid, combined with a base, has been the fashionable remedy for a variety of affections.

The latest combination is the salicylate of mercury, which DR. SYLVA ARANJO, of Rio Janeiro, has been using with some success in certain obstinate cases of syphilis. In a letter to the Bulletin Général de Thérapeutique, he gives some details to his method. The salt is formed by the double decomposition of the salicylate of potassium with the acid nitrate of mercury. He began by administering one milligram in a pill every morning, and if this was borne well, one, morning and evening, until it was given three times a day, and increased to such doses that the patient took in the end 25 milligrams during the day. It was also used externally as an ointment in the strength of 50 centigrams to 1 gram to 30 grams of vaseline. As an injection for blennorrhagia, it is employed in the strength of 10 grams to 250 grams of water, with enough of carbonate of sodium to make a solution. The advantages which DR. ARANJO claims for this drug, are:

1. It is supported easily by the stomach without any bad effects.
2. It does not cause mercurial stomatitis.
3. It acts much more promptly than the other salts of the same base.
4. Used externally, it has a curative effect on the mucous patches and the other ordinary syphiloderms.
5. In many of the parasitic diseases it is of great advantage.
6. It is very effective where other forms of mercury have no effect.

In one case DR. ARANJO had used without effect the protiodide, the bichloride, the biniodide, the tannate, and phenate, as well as the iodides of potassium and sodium.

7. It is of use in lepra.
8. As above stated, it forms one of the many injections for blennorrhagia.

Also in catarrhal and granular conjunctivitis, as a collyrium, in the following prescription it has been very effective:

℞ Salicylate of mercury, 0.50.
Distilled water, 30.
Carbonate of potassium, q.s.
M. For eye-wash.

—*N. Y. Record.*

THE THERAPEUTICAL VALUE OF BISMUTH SALICYLATE.—Recently DR. JAMES WARE, of Lake Charles, La., communicated to DR. W. H. HALE, of Philadelphia, the following cases in which he had found the preparation useful:

1. Female, aged 45; dysentery. At end of five days of treatment with opium, and so on, I gave:

℞ Bismuthi salicyl., gr. c.
Bismuthi subnit., gr. c.
M. Ft. pulv. No. vj. div.

Gave one powder every three hours. The woman was entirely relieved in 12 hours.

2. Female, aged 23; dysentery. Gave salicylate as above, also by enema, thus:

℞ Bismuthi salicyl., gr. cc.
Glycerini, f ʒ j.
Aquæ, f ʒ vj.
M. Sig.—f ʒ ., in three ounces of tepid water, after each stool,

Woman was well in 48 hours. In three days, from over-eating, she had a severe relapse. Same treatment entirely relieved her in 24 hours.

3. Child, aged three, just from Iowa. Never fully recovered from an attack of cholera infantum last summer. Relieved by salicylate. in eight-grain doses.

4. Male, aged 25; periodical fermentation of contents of bowels every 10 or 12 days for a year. Relieved now at the beginning of every attack by 15 grains each of the bismuth salicylate and subnitrate.

5. Female, aged 20; pruritus vulvæ. Suffered terribly for several days. Used corrosive sublimate, carbolic acid, and other remedies, with no benefit; then employed:

℞ Bismuthi salicyl., gr. c.
Aquæ, f ʒ iv.
As a vaginal injection; relief instantly.

6. Female, aged 56; fermentation of contents of stomach and bowels every 10, 20, or 30 days for 20 years, accompanied with violent pain and frequent discharges of acid mucus. Relief generally came in from 30 to 72 hours. In the midst of an attack I gave 10 grains each of salicylate and subnitrate, with immediate relief. She has taken this amount night and morning for 30 days, with no return of the disease.—*The Polyclinic*, March, 1888; *Med. Register*, April 7, 1888.

THE ACTION OF SPARTEINE.—Although sparteine has been known for many years, it is only within a comparatively recent period that its valuable properties as a true heart tonic have been recognized and carefully studied. Dr. J. Pawinski, of Warsaw, has recently made a somewhat extensive series of experiments with the drug (Gazeta Lekarska, Nos. 1 and 3, 1888), and comes to certain conclusions which

are of interest, as they differ in some respects from those of other writers.

1. Sparteine acts without doubt on the heart and great vessels.

2. In small doses, of one-fourth to one-half grain, three times a day, it increases the strength of the heart's action, reduces the number of pulsations, and raises the blood-pressure. In large doses, one and a half to two grains, every two hours, it exerts a paralyzing influence on the heart, diminishing the frequency and force of the beats, as evidenced by a slow, feeble, and often intermittent pulse.

3. The best therapeutic effect is obtained with small doses.

4. Small doses stimulate, while large ones paralyze, the pneumogastric nerve.

5. Stimulant action of sparteine upon the heart cannot be regarded as very considerable, and in this respect digitalis is superior.

6. In small and medium doses sparteine seems to exert a stimulant effect upon the vaso-motor centre in the medulla, in consequence of which the vessels become contracted.

7. The action of sparteine is rapid, its effects being observed within half or three-quarters of an hour, and continuing for four or five hours.

8. The best effects of the drug are seen when it is administered to delicate, nervous, or anæmic individuals.

9. In addition to its action upon the heart and vessels, sparteine also exerts a soothing influence upon the nervous system, being sometimes distinctly, though slightly, hypnotic.

10. The diuretic action of sparteine is not important. It is uncertain, occurring usually, however, in persons possessing considerable nervous susceptibility, whose cardiac muscle is not degenerated in consequence of morbid changes in that organ or elsewhere. The diuretic action of the drug, such as it is, seems to be due to the vascular changes produced by its influence.

11. Sparteine does not exert any cumulative effects, and may therefore be administered for a considerable length of time without fear of any sudden injurious consequences.

12. Sparteine does not produce any digestive disturbances, and does not affect the appetite. —*Med. Record*, April 7, 1888.

SOLVINE.—Solvine is a whitish, opalescent substance prepared by the action of sulphuric acid upon oil of almonds or castor oil. It acquires its peculiar name because it has a remarkable solvent power upon a number of comparatively insoluble substances such as iodoform, naphthalin, naphthol, salicylic acid, cantharidin, santonin, aloin, etc. It is miscible in all proportions with glycerin, and with substances dissolved in glycerin. It forms clear mixtures with ether, chloroform, benzole, turpentine, and essential oils; and these mixtures are themselves soluble in water, if there be no great excess of any one ingredient. These facts have led to a recommendation that solvine shall be used as an excipient for a variety of medicaments intended for endermic use, instead of lard, vaseline, lanolin, and so on.

But PROF. KOBERT, of Dorpat, has recently called attention to a danger which, he believes, attends the use of solvine as an external application. This danger depends upon its ready absorption through the skin, and consists in what KOBERT considers distinct toxic properties. In a paper quoted by the Gazette Medicale, Feb., 1888, from the Therap. Monatshefte, Dec., 1887, KOBERT states that solvine rapidly dissolves the red blood corpuscles in a test-tube, and that when injected into the veins of warm-blooded animals, it produces serious poisoning.

These facts certainly justify the opinion expressed by KOBERT that solvine should be used with prudence. Still, we believe that there are no clinical facts which warrant the theoretical fears of KOBERT. How far solvine has come to be used in practice we cannot say; but there need be no timidity in employing it as a vehicle for external application simply because it breaks up red blood-corpuscles in a test-tube, or kills frogs. Here prudence is justifiable, but not fear; and it is to be hoped that a substance which has such extraordinary powers as a solvent will not prove to be dangerous when used for the purposes for which solvine seems to be so well suited.—*Med. and Surg. Reporter*, March 24, 1888.

IODOL AS A SUBSTITUTE FOR THE IODIDES AND IODOFORM.—Much has been said of late regarding the value of iodol. On the whole, it has not made as yet a great impression. But it is destined to do so, according to DR. GEORGE ASSKY, who, in the Archives Roumaines for November, 1887, contributes a second article, recording his experiences with the drug.

Iodol, or tetraiodopyrrol (C_4I_4NH), is a brownish-yellow powder, inodorous, almost insoluble in water, but soluble in alcohol, ether, and fats. It contains about 88 per cent. of iodine, and is less rich in that element than iodoform. Taken into the system it is excreted as iodine in the urine. It is about one-third less poisonous than iodoform, but its toxic phenomena are the same. It can be given internally in doses ranging from gr. v. to gr. xv. "It better borne than iodoform, and sometimes acts much better than iodide of potassium" (PICK).

The first therapeutic researches were made by WOLFF, in 1885. In these it was simply shown that iodol was a good antiseptic. In the same year MAZZONI reported upon its use topically in venereal diseases. He particularly claimed that no erysipelas followed its use, as sometimes happened with iodoform. In 1886 BENNO SCHMIDT, A. TROUSSEAU, L. SUYUET, G. FERRAND, F. J. PICK, and MAZZONI published communications. MARCUS tested its toxic properties, while PICK used it internally. He never observed poisonous symptoms or iodism, and, like other observers, he found that iodol was much more slowly eliminated than the iodides.

ASSAKY, in his two communications last year, dwells especially upon the value of iodol in surgery, where he thinks it superior to iodoform; but he also places a high estimate upon the drug as an internal agent. It has, he says, "marvellous effects" in tertiary syphilis and scrofula, acting more quickly than the iodides. —*Med. Record*, April 14, 1888.

ANTHRAROBIN IN THE TREATMENT OF SKIN DISEASES.—At a recent meeting of the Berlin Medical Society, Behrend reported that he had used anthrarobin in cases where chrysarobin and pyrogallic acid were commonly used, with

good results. Anthrarobin is a whitish-yellow powder, sparingly soluble in water, soluble in ten parts of glycerin at 212° F., in ten parts of cold, absolute alcohol and five parts of warm alcohol. It makes a good ointment with oil, and was used in ointments of ten and twenty per cent., in a tincture of ten per cent., and a glycerin solution of ten per cent. Anthrarobin is less irritating than chrysarobin, and can be used upon the face and eyelids. It colors the skin yellow, and a burning sensation follows its first application, which does not generally persist. It is well to precede the use of the anthrarobin by the use of green soap, which will remove any obstacles to the action of the medicament. The effect of anthrarobin lasts longer than that of chrysarobin, and it is considerably cheaper. It is more potent than pyrogallic acid.—*Deutsche med. Wochenschrift*, March 8, 1888.

INCUBATION AND GAVAGE.—At the February meeting of the Obstetrical Society of Philadelphia, DR. HIRST exhibited the incubator in use at the Maternity Hospital. It is a simplified Crede's incubator, a double-walled bath tub made of copper; hot water is poured into the space between the walls, and a temperature maintained within the tub of nearly 100° Fahr. He also described, in all its details, the system of gavage in use at the same hospital; it consists in forcing into the child's stomach, through a soft rubber catheter, by means a small glass syringe, about 1½ drachms of human milk every hour. A table showing the daily weight of a premature infant, born at the 20th day and treated by this method, was presented; the child weighed at first 1080 grammes, at the end of the first month the weight was 1460 grammes. TARNIER, instead of a syringe, uses a glass in this treatment.—*Obst. and Clin. Record*, March, 1888.

SACCHARITE OF COCAINE.—DR. ANDREW H. SMITH writes to the New York Medical Record. "Observing the strong acid property of saccharin, it occurred to me that it could be made to take the place of an acid in combination with the alkaloid cocaine, and thus avoid the extremely bitter and disagreeable taste of the muriate, the salt usually employed. With the aid of MR. B. FRANK HAYS, the well-known pharmacist of New York, a salt was obtained which is freely soluble in water, and has an agreeable, sweet, fruity taste—a valuable property when the drug is to be employed in the throat, especially in the case of children. The molecular number of saccharin (a better name would be saccharinic acid) is 183, that of cocaine, 303; combined in these proportions a neutral salt is formed having about 80 per cent. of the alkaloidal strength of the muriate, a 5-per-cent. solution of the first being equal to a 4-per-cent. solution of the second."

ELECTRO-THERAPEUTICS OF SPERMATORRHŒA.—WAGNER recommends the application of the faradic current in spermatorrhœa based upon sexual excesses or due to constitutional weakness. Local galvanization is, in his opinion, useless in these, but highly beneficial in spermatorrhœa connected with inflammatory conditions of the urethra, the prostatic gland, and whenever the semen is lost during micturition or defaction. The positive pole is to be placed on the lumbar region, the negative on the spermatic cord.—*Berlin. Klin. Wochenschrift*.

GLYCEROLE FOR PIGMENTARY SPOTS ON THE SKIN.—DR. UNNA prescribes the following:

℞ Oxide of bismuth,
Rice starch, āā ij grs.
Kaolin, iv grs.
Simple glycerole, 2 grs.
Distilled rose-water, q. s.

Put this mixture, by means of the forceps, on the pigmentary spots and let it dry. Bathe carefully before making the application.—*Le Clinique*.

A CONVENIENT SOLUTION OF SACCHARIN.—Chamberlin, in the Australian Journal of Pharmacy, No. 26, 1888, reports the following convenient preparation of saccharin:

I have, as a sample, produced the following, and found it makes a pleasing, reliable solution:

Saccharin, gr. 80; potass. bicarb., gr. 40. Mix immediately with glass mortar. Add glycerin, ℥ iss; aq. destil., ℥ iss. Allow escape of carbonic acid gas, transfer to flash, and melt gently in water-bath. This contains about gr. 1 in min. 20, sufficient for a cupful of milk.—*Med. News*, April 14, 1888.

THE TREATMENT OF CONVULSIONS IN CHILDREN.—SIMON has found the following, by rectal injection, most useful:

Chloral hydrat., gr. 15.
Tinct. moschi, gtt. 20.
Aquæ, ℥ 12½ to 15.

This may be given in two rectal injections, care being exercised to avoid violence, which may irritate or injure the bowel.—*Gazette Médicale*, March 3, 1888.

GERANIUM MACULATUM IN CHRONIC BRONCHITIS.—The Journal de Médecine of March 11, 1888, gives the following as a useful prescription in chronic bronchitis and bronchorrhœa:

℞ Tinct. nucis vom., ℥ 1.
Tinct. sanguinariæ, ℥ 1.
Ext. fluid. geranii., ℥ 1½.
Syrup. simpl., ℥ 1½.

Of this a drachm should be taken every four hours.—*Med. News*, April 14, 1888.

FORMULA FOR CAUSTIC CRAYONS.—DE SINETY gives the following formula in L'Union Médicale of March 17, 1888:

Acid. carbolic. cryst., gr. ¾.
Tannin, gr. 60.
Glycerin, gtt. 5.
Gum. tragacanth, q. s.

These crayons should be about one inch long, and one-eighth of an inch in diameter.

The Medical Age.

Vol. VI. DETROIT, MAY 10, 1888. No. 9.

Original Articles.

THE CUTANEOUS MANIFESTATIONS OF SYPHILIS.

BY GEORGE H. ROHÉ, M. D., BALTIMORE, MD.*

THE PAPULAR SYPHILIDE.

In a case of syphilis passing through its regular evolutionary cycle the papular syphilide is the second in order of the cutaneous manifestations of the disease. This lesion appears under several morphological characters, which differ so much clinically that they require separate description. In order to distinguish the peculiarities of each of these varieties of the papular syphilide it will be well to make the following division:

a. The conical papular syphilide.
b. The flat papular syphilide.
c. The scaly papular syphilide.
d. The moist papular syphilide.

a. The Conical Papular Syphilide.

[Synonyms: Miliary Syphilide, Lichen Syphiliticus, the Small Papular Syphilide, Papulo-granular Syphilide.]

The eruption of the conical papular syphilide generally follows very closely upon, or may be contemporaneous with the erythematous syphilide. Its period of eruption is usually completed within a week. Sometimes the entire eruption comes out in the course of forty-eight hours. It appears in the form of acuminate papules from the size of a minute punctiform elevation to two millimeters in diameter. The color of the papules is at first bright red, later becoming brownish or livid. The surface is smooth and shiny except when covered with desquamating epithelium. At times the apices of some of the papules contain minute droplets of serum constituting small vesicles. Some authors have described this stage of efflorescence as a separate variety under the name of the vesicular syphilide. The vesicular stage of the papule is, however, very transient, the fluid being either reabsorbed or evaporating, leaving the papule capped by a small scale, consisting of the upper layer of the epidermis which has been raised off from the rete below by the effused serum. During the involution of the eruption, which is usually a very slow process when untreated, lasting from two to three months, the color undergoes the modifications mentioned, and there is sometimes desquamation of the papular summits. In colored patients this is sometimes so marked as to give the lesions a distinctly white appearance. When the papules become absorbed, they leave, according to Kaposi, minute depressions of the surface, to mark the seat of the lesions.

The acuminate syphilide is most freely distributed upon the face and back, but no portion of the surface is exempt from it. It is less frequent upon the palms or soles, where it may be substituted by the flat papular eruption. In some situations, particularly the genital region, and the flexures of joints, it is aggregated in solid sheets from two to five centimeters (one to two inches or more) in extent. FOURNIER describes this as a separate variety. The papules are sometimes, though not very frequently, arranged in circles or crescentic groups.

Differential Diagnosis of the Conical Papular Syphilide.

The disease most likely to be mistaken for this form of the papular syphilide is lichen planus. In many cases the diagnosis is very difficult unless other concurrent specific symptoms are present. I have at present under treatment a case of lichen planus in which this resemblance is striking. The main points of difference are the slower evolution in lichen and the tendency to become aggregated in patches with a flat surface. In lichen there is usually itching, while in the papular syphilide this symptom is rare. Papular eczema can generally be excluded by the dull color of the eruption and the intense itching.

Prognosis.

The conical papular syphilide is often exceedingly resistent to treatment and may recur after disappearing. The recurrent form—sometimes two or three years after the first outbreak—is usually only sparsely distributed in in small groups and patches in the articular flexures of the elbow and knee (KAPOSI).

b. The Flat Papular Syphilide.

[Synonyms: Lenticular Syphilide, Large Papular Syphilide, Syphilide Merisée].

The flat papular syphilide differs from the preceding in the size, form and distribution of

the lesions, its frequency, and its mode of evolution. The lesions vary in size from five millimetres to two centimeters (one fourth to three fourths of an inch) in diameter. They are elevated above the skin, and either flat or slightly convex on the surface. The papules come out in succession, in a subacute or chronic course and usually persist for months. Their shape is rounded or oval, and the color that generally characteristic of the syphilides. The base of the papules seems to be sunk deeply in the skin. They are firm to the touch of the finger and cannot be made to disappear under pressurer The surface is either shiny, or covered with minute whitish scales. When undergoing involution they become smaller and flatter, and when the infiltration has disappeared a brownish pigmentation is usually left which slowly fades out and may give place to a whitish spot indicating deficiency of pigment. There is sometimes also an absorption of normal tissue, leaving a slight atrophic depression to mark the site of the former lesion.

The lenticular syphilide is the most frequent form of the papular eruption. It is usually disseminated, not aggregated in groups, and may be found on almost any part of the surface of the body, although, like the other syphilides, it has certain seats of predilection and exclusion. Its favorite points of localisation are, the frontal, fronto-temporal, and occipital margins of the hairy scalp, the scapular and sacral region, the genito-crural fold, the angles of the mouth and nostrils, the flexures of the elbows and knees, and the inner surfaces of the inner arms and the thighs. The face, except the localities mentioned, the extensor surfaces of the limbs and the dorsal surfaces of the hands and feet are almost entirely exempt from the eruption of this lesion.

Difficulty in diagnosis can rarely occur between the flat papular syphilide and other cutaneous affections. When the papules are very scaly, they may suggest psoriasis, but the different localization, and indeed the entirely different clinical history of the latter disease will furnish a ready means of diagnosis. Subjective symptoms are absent in the syphilitic eruption.

This lesion is, like the miliary syphilide, frequently an early manifestation of syphilis. It is sometimes found accompanying the erythematous eruption, but it is not rare as a late form, being classed by some authors, among the late secondary or intermediate eruptions. It frequently relapses, after months or years from the date of its first appearance.

C. The Scaly Papular Syphilide.

[Synonyms: Syphilitic Psoriasis of the Palms and Soles; Squamous Syphilide, Papulo-squamous Syphilide, Lepra Syphilitica].

This variety of the papular syphilide although one of the most characteristic of the cutaneous manifestations of the disease, nevertheless gives rise to more mistakes in diagnosis than any other cutaneous lesion. Its study therefore demands especial attention.

As mentioned in the last lecture, the erythematous syphilide when it occurs on the palms and soles frequently becomes scaly. The same modification occurs in the papular syphilide when it occupies these localities. Indeed the appearance of a papular syphilide of the palms is so strikingly different from the same lesion occurring upon other parts of the body that in naming it, the elementary lesion is ignored and most syphilographers speak of it as palmar and plantar psoriasis, while others term it the squamous syphilide. Both of these names are improperly used, since psoriasis is an independent cutaneous disease, as widely different as possible in essential nature from syphilis, while dermatologists and syphilographers are fully aware that the desquamative process in the eruption under consideration is merely a stage of involution in the history of the elementary lesion, *i. e.* the papule.

The scaly papular syphilide develops in the following manner: brownish-red papules, about half a centimeter (one-fourth of an inch) in diameter appear upon the skin of the palms and soles. When they are abundant they may extend over the palmar and plantar surfaces of the fingers and toes. Sometimes after the affection has lasted a long time, the eruption may invade the lateral surfaces of the fingers. The dorsum of the hand or foot is, however, never attacked.

At first these papules are not elevated above the surface, on account of the thickness of the epidermis, but the infiltration can readily be detected by the touch. Gradually the lesions become slightly elevated, and the surface becomes hard and callous, like the callosities produced by the use of certain tools. Presently the tops of the papules become detached spontaneously, or are scratched off by the patient, and leave a red base surrounded by a finely serrated whitish scaly margin. The young epidermis on the surface of the lesion rapidly becomes dry and is exfoliated and thus the desquamation becomes more or less continuous.

The deep lines in the palm and the flexures of the fingers are the preferred seats of the papulo-squamous eruption. On the plantar surface the concave arch is most frequently affected. The constant motion to which the integument of the palms is subjected causes deep fissures in the infiltrated skin. These sometimes extend into the cutis and give rise to severe pain with every movement of the hands or fingers. This constitutes one of the exceptions to the general rule that the syphilides are not accompanied by subjective symptoms.

This eruption may extend along the fingers

and invade the matrix of the nails, which become brittle and lose their lustre.

When the lesions have persisted a long time, the elementary characters are gradually lost and a diffused brownish-red infiltration with a broken squamous surface is seen. In this stage there are often no other evidences of syphilis apparent on superficial examination, and an exact diagnosis may be difficult.

Differential Diagnosis of the Scaly Papular Syphilide.

"Quoties ego video pustulas istas in capite, aut rhagades in manibus, indicium certum profero Gallici: cætera signa fallunt nos, hæc certissima sunt" expressed the confidence of GABRIEL FALLOPIO in the value of this lesion as a diagnostic mark of syphilis. RICORD, more positive than his predecessor of the sixteenth century, called the papulo squamous syphilide of the palm and sole "the diagnostic of pox, written on the hand or foot of the patient," and FOURNIER, whom we may regard as among the greatest of modern syphilographers, states that "palmar or plantar psoriasis is *a veritable certificate of syphilis;* an authentic certificate, against which there is no possibility of protest." I should be glad to accept the assurances of these distinguished masters that a palmar psoriasis is necessarily syphilitic, were it not established by a number of carefully observed and recorded cases, that a non-syphilitic psoriasis may occur upon the palms. This fact makes it necessary to point out the distinguishing features between the scaling syphilide of of the palms and other affections that may be mistaken for it.

The disease most likely to be mistaken for the papulo-squamous syphilide is non-syphilitic psoriasis. In this disease there is a bright-red, slightly elevated base, covered with white, silvery scales. On scratching off the scales with the finger nail, a thin pellicle is found, which, if detached, is followed by a droplet of blood. The lesion begins as a red papule, which rapidly becomes covered with the white scales and which rapidly extends peripherally, so that if closely examined the true psoriatic lesion is found to consist of a pretty uniform sheet of elevated eruption, while the syphilitic manifestation is made up of individual papules more or less closely aggregated, and only incompletely covered with scales. They are also more firmly adherent than in psoriasis, and often consist of little plates of cornified epithelium rather than fine imbricated scales. Too much stress must not be placed upon the appearance of the scales, however, for the occupation of the patient, or the attention he pays to the cleanliness and culture of the skin generally, may materially modify the ordinary appearance of the eruption. Much more reliance should be placed upon the clinical history of the case, for although as RICORD has well said: "the science of the physician is above the asseveration of the patient," much help may often be obtained from the patient's account of the origin and progress of the lesions. In true psoriasis there is usually a history of repeated outbreaks since early youth. Furthermore, the eruption is especially liable to be localized upon the extensor surfaces of the extremities, the elbows and knees and the skin over the sacrum being favorite seats of the psoriatic lesions. In psoriasis, moreover, there is more or less pronounced itching, while this symptom is generally absent in the syphilitic eruption. In cases of doubt the aid of medicinal treatment may be invoked in order to clear up the diagnosis. The syphilide will resist arsenic and yield to mercury, while psoriasis generally disappears if arsenic be given, but is not affected by mercury.

In scaly eczema of the palm there is always the scaly characteristic infiltration giving the peculiar "leathery" feel to the skin when pinched up, the itching is usually very troublesome, and there is a history of occasional vesiculation and "weeping" of the affected surface. The thickened skin is often deeply fissured and the fissures may bleed or exude serum and cause severe pain at every movement of the fingers or hand. Upon the soles, the epidermic accumulation is sometimes exceedingly great, being at times from half to one centimeter (one-fourth to half an inch) in thickness.

d. The Moist Papular Syphilide.

[Synonyms: Mucous patches of the skin; condylomata lata; pustula fœda ani; moist papules; plaques muqueuses; schleimpapeln; feigwarzen.

Upon surfaces of the skin more or less constantly in contact with one another, as in the genital and perineal regions, the gluteal folds, the axillæ, between the toes, the folds of pendulous breasts, the umbilicus, or, in fact, any portion of the surface, kept constantly moist and warm, the papular syphilide undergoes certain transformations which necessitate description. The papules developing in such parts become macerated, the epithelial covering becomes softened and destroyed, and the whitish moist surface of the rete mucosum, with numerous little red points indicating the summits of the papillæ, present themselves to view.

The warmth and moisture tend to increase the nutrition of the parts, and the papular lesions, which on other dry portions of the surface rarely exceed a diameter of half a centimeter, here undergo an excessive development, and the moist papular syphilide varies in size from to two, three or four centimeters in diameter.

These broad condylomata are distinctly elevated above the surface of the surrounding skin with a sharply-defined margin, have a pinkish, bluish, or brownish surface, and discharge freely an offensive puriform secretion. The surface is sometimes elevated, constituting a fungoid growth. Sometimes a large number of these mucous patches are closely aggregated together on surfaces especially favorable to their development. This is particularly liable to occur about the genitals, anus, or perineal region. I have seen a case in which the vulva, perineum and the inner surfaces of both thighs nearly to the knees were so thickly covered with profusely secreting moist papules that the raw surface looked like a continuous erosion or ulceration, elevated above the surface. At the borders of such a patch where the skin is kept dryer, the papules are less thickly scattered, and gradually the moist type is entirely lost, and the usual form of the dry papular syphilide is met with. Sometimes the moist surface undergoes ulceration, at others it becomes diphtheritic. In either event a loss of substance and healing by cicatricial tissue is likely to follow. This is especially seen in those moist papules occurring on mucous membranes, as in the mouth where the mucous patch is generally in the shape of an ulcer.

Moist papules are among the most frequent early constitutional manifestations of syphilis. Their secretion is highly contagious, and from their situation they are particularly liable to propagate the disease.

LANCEREAUX* gives tables compiled from the works of DAVASSE and DEVILLE, and BASSEREAU, showing the seats of predilection of this lesion in the two sexes.

In 186 women, the moist papules were seated:

Upon the vulva, 174 times.

Upon the anus, 59 times.

Upon the perineum, 40 times.

Upon the buttocks and inner surface of the thighs, 38 times.

Upon the tonsils, 19 times.

Upon the nose, 8 times.

Upon the tongue, 6 times.

Upon the toes, 5 times.

Upon the face, 5 times.

Upon the navel, 3 times.

Around the nails, 2 times.

Upon the ears and velum palati, 2 times.

Upon the inguinal fold, 2 times.

Upon the neck, nipple and cervix uteri, 1 time.

In 130 men, the seat of lesion was:

At the anus, 110 times.

Upon the tonsils, 100 times.

Upon the scrotum, 60 times.

Upon the lips, 55 times.

Upon the glans and internal surface of the prepuce, 28 times.

Upon the pillars of the palate, the tongue and the internal surface of the cheeks, 73 times.

Between the toes, 11 times.

In the genito-crural fold, 5 times.

At the orifice of the nares, 2 times.

Upon the posterior wall of the pharynx, 2 times.

At the insertion of the toe-nails, 2 times.

At the meatus urinarius, in the axilla, upon the gums, and the internal face of the thighs, 1 time.

DESPRES* has reported five cases in which the moist papular syphilide was found in the external auditory meatus. The lesions have also been observed upon the external ear, the vocal cords, the lachrymal caruncle and the conjunctiva.

Differential Diagnosis of the Moist Papule.

The only affection with which the moist papule or mucous patch is liable to be confounded is the pointed venereal wart, or gonorrhœal wart. The lesions are essentially different not only in their histology, but in macroscopic appearance, and attention is merely called to their difference here because the pointed warts are sometimes assumed to be syphilitic manifestations by careless observeres. In rare cases, an excessively irritated ringworm of the genito-crural region may simulate the moist papular syphilide, but the free secretion, the offensive odor, the absence of itching and the distinct elevation of the affected surface above the level of the skin in the latter will usually suffice to distinguish it from the non-specific disease.

Minute Anatomy of the Papular Syphilide.

The histology of the syphilitic papule has been carefully studied by CORNIL and KAPOSI. The epidermal layer and the *rete* are preserved in the dry papule. The *rete* is, however, thinned at the apex of the papular lesion. At times the line of demarkation between the corium and the mucous layer is indistinct. The *rete* cells are dentated and have vacuoles. This is well shown in figures 33, 35 and 36 of CORNIL'S work on Syphilis. Similar changes occur in the moist papule or mucous patch.

The corium and papulæ are infiltrated with small round cells which resemble white blood-corpuscles, but are usually much smaller. The papulæ are hypertrophied and project into the mucous layer, while the inter-papillary prolongations of the *rete* also project deeper than normally into the connective tissue layer. The color of the syphilitic papule is partly due to congestion and partly to actual extravasation from the engorged blood-vessels. Giant cells are also found in the cutis. The walls of the blood-vessels are studded with highly refrac-

*Traite de la Syphilis, p. 168.

* Cornil on Syphilis. Philadelphia, 1882, p. 131.

tive nuclei, but the calibre of the vessels seem to be normal.

In the moist papules the same general histological features are maintained, but the papillæ are very much increased in size and knobbed or branched at their extremities. In the centre of a suppurating mucous patch, however, the epithelial layer may have entirely disappeared and the ulcerating surface of the papillæ or even of the cutis itself may present itself to view.

Prognosis of the Papular Syphilide.

The papular syphilide usually runs a chronic course, but is easily influenced by appropriate treatment. Local as well as general measures must be employed. Moist papules are particularly liable to recur.

DIETETICS AND INFANT FEEDING.

BY W. I. THAYER, D. D. S., M. D., BROOKLYN, N. Y.

Some gentlemen of keen observation and years of experience, remarked in the hearing of the writer, that young folks are degenerating in physique and general stamina; that ladies do not seem to endure by way of exercise, exertion, or work; they must ride, instead of walk, even a short distance, etc. This observation is unquestionably true, in a large sense, and it would certainly seem that the younger portion of this generation are growing weaker and more effeminate.

There probably never was a time since man was created, when the bony tissues were in so soft and frail a condition, attacked by decay so early, as is their true condition to-day. The medical profession are somewhat to blame for this condition of affairs, for they certainly have not come up to the full measure of their duty in preventing the deplorable state of dental depravity which exists. It is well enough to cure the sick when ill, but better yet to prevent any and every form of disease. Prophylactics and hygiene together with reconstructives are beginning to receive some, but must command much more attention and consideration.

We understand the bony tissues to embrace the teeth. Hence, when we speak of their degeneration, we survey a subject that cannot be confined to the dentist alone, but must be considered by the physician. The earliest information regarding these is to be received from the family physician, who should most cheerfully instruct the parents of growing children in the science of dietetics that shall have such a tremendous bearing on the future welfare of all the young for many years to come.

To show how to stop this alarming tendency to decay of the teeth that is altogether too patent to-day, it is well for us to note in a gross analysis their construction.

Teeth are composed of two substances; calcareous salts and soft solids, the three tissues entering into this combination being the enamel, dentine and cementum. The enamel when up to the full measure of normal condition, contains some 96.41 per cent. of the lime salts. Dentine 78 to 80 per cent. Cementum from 67 to 69 per centum. Cementum in lime salts, and anatomical construction is much like bone. Hence its adaptability to the soft tissue of the periosteum. Enamel would hardly be tolerated in the alveoli.

In density, there are petrous, hard, soft, and very soft teeth. It is the deposit of earthy or inorganic matter amidst the soft solids of tooth structure that gives them their hardness and ability to resist disintegrating influences.

There is but one way to get this calcareous matter into tooth structure, and that is by pabulum and absorbtion—appropriation. If there is nothing to appropriate, starvation and poverty of tooth structure is the termination. A result of the deprivation of certain kinds, even of certain forms of food, is soft, frail and rapidly decaying teeth.

Of all the kinds of food that have the ability of supplying these necessary lime salts for proper tooth building, is the cereal foods. The immediate outside of all the grains is rich in carbonate and phosphate of lime and phosphate of magnesia, also soda which enters so largely into the construction of good teeth. The wisdom (?) of the millers of Minneapolis, Rochester and other flouring centers, have done more to break down the former good structure of American teeth, than any other means practiced by the people of this country.

One great fact that should be kept constantly in mind in regard to the teeth is, that they are built up once for all. The teeth commence to form as early as the sixth week of gestation. Therefore, it is of importance what kind of food the mother has, as it is conveyed to the infant. What cereal foods are eaten should be made out of the meal or unbolted flour. No food that one can take possesses the lime salts in such a condition, as to be easily appropriated by every needy osseous tissue as do these coarse cereal foods in the form of Graham bread, oatmeal, Indian and rye meal or brown bread, so-called. Where the meal of any specific grain is used, instead of the bolted or sifted product. then the petrous tissues have something to construct themselves out of, that will insure a dense, strong and compact tissue, able to resist disintegrating influences.

The teeth are in their formative stage for the first twenty-one years, and for the next six years, they can be "stuffed" with lime salts to a limited degree.

It should not be forgotten that the younger

the child is properly fed, that is, from pabulum derived from this source, the stronger will be every portion of growing and grown teeth. Almost every tissue of the body has in its composition more or less of the lime salts.

This coarse bread food must be used by the mother. She must and does supply these salts to the fœtus. If the child nurses from the human breast, then that nutrient supply must be furnished with the lime salts.

ANALYSIS BY DR. STUTZER.

	Carnrick's Soluble Food.	Nestle's Food.	Mellin's Food.	Wells, Richardson & Co's Lactated Food.	Horlick's Food	Dr. Ridge's Patent Food.	Anglo-Swiss Milk Food.	Imperial Granum.
Fat	5.00	4.66	0.50	2.19	0.60	1.27	2.37	0.80
Protein substances—albuminoids	18.22	11.46	8.34	9.05	11.30	8.76	12.38	10.73
Hydro-carbons—dextrin, etc.	67.74	76.69	79.29	78.44	79.04	80.45	76.03	78.88
Cellulose		0.10	0.58	1.54	0.55	0.73	1.09	0.97
Water		5.34	7.76	6.52	5.75	8.31	6.18	8.25
Salts and inorganic substances	6.14	1.75	3.35	2.26	2.76	0.48	1.95	0.37
Amount of nitrogen in protein substances	2.915	1.833	1.335	1.448	1.809	1.403	1.981	1.717
Amount of protein substances READILY DIGESTIBLE	16.45	11.09	7.38	8.35	10.85	7.97	11.20	9.65
Proportion of nitrogenous alimentary substances, protein=1	1:4.4	1:7.7	1:9.6	1:9.2	1:7.1	1:9.3	1:6.6	1:7.5
The inorganic constituents contain { Lime	0.645	0.390	0.155	0.390	0.060	0.060	0.520	0.001
	0.874	0.630	0.538	0.088	0.421	0.260	0.800	0.167

There is at the present day a large proportion of infants that are bottle fed. Fed with what? Every conceivable compound from cow's milk to corn starch and farina. Not any of these having the lime salts, save the cow's milk, and that having a large per cent. of tough casein that is digested with great difficulty. Then again the market is flooded with a large number of "infant foods", and of that variety which shall we select?

PROF. STUTZER, of Bonn, Food Analyst of Prussia, has made an analysis of eight different kinds of infant foods which I find published in the Pharmaceut. Central Halle, Berlin, 1886, No. 8, and transcribe herewith:

Now we find that these eight foods vary much in their compositions. For certain purposes some are of very little value. It is a very important matter for some infants to have an easily digesting food; especially in cases of cholera infantum and other bowel lesions, marasmus and a feeble digestive apparatus.

We find that the easiest digesting food is found in the first column and represented as 16.45 per cent. One runs as low as 7.38, that is more than twice as difficult to digest as the former. This matter of digestion is quite as important as the quality of pabulum furnished, and applies to the amount of protein substances.

Now, the facts are, that a large proportion of these fooods are *sadly unbalanced* in their protein, nitrogenous and inorganic substances, and useless in supplying pabulum for the petrous tissues and the bones. Notice the inorganic constituents in the last column; as for lime, 0.001, and phosphoric acid as 0.167, and compare with 0.645 and 0.874 in first column. The Anglo-Swiss comes next to a proper standard, but then we find in this seventh column its fat-producing pabulum, less than one half of first column, while Imperial Granum is down to 0.80 per cent. So would baked wheat flour show as good results.

Of the "salts and inorganic constituents," as STUTZER terms these petrous tissue builders, we find in the first column $2\frac{99}{100}$ (2.99) together with the lime and phosphoric acid of 0.645 and 0.873—see below in first column—and of Mellin's food, in "inorganic constituents," we have 5.53 per cent., but a deficiency of lime, only 0.155, and phosphoric acid 0.583, and of fat 0.50, and in "protein substances" a marked deficiency, being only 8.34; showing all through most of these combinations a lack of balance to such a degree that some of the tissues of infant life must suffer as a consequence.

Not only the digestibility of the albuminoids —protein substances (see table)—and inorganic constituents must be considered and weighed together, but a really valuable infant food ought to be free from cellulose. That condition we find only in Carnrick's food.

Three of these foods are known as "Milk Foods:" Carnrick's, Nestle's and Anglo-Swiss. The best contain as much as fifty per cent of evaporated milk; some as low as ten per cent. The casein in the milk must be partly predigested in the laboratory in order to make the prepared food easy of digestion. The starches entering into the composition of an infant food must also receive a conversion into a similar substance, such as the amyolytic ferments of the saliva; pancreatic and intestinal juices would give these hydro-carbons, in order that

they may be the more easily appropriated. This is done by a continued heat of 350° F., for eight hours. This baking converts the starches into dextrine, which is but one remove from maltose.

Dextrine will not ferment in weakened invalids' or infants' stomachs. But maltose is extremely liable to be converted into vinous or sour ferment and irritate the whole digestive tract. Therefore, malt foods are very inappropriate for infant feeding on account of the malt sugar, which is quite as liable to ferment as is cane sugar.

An exceedingly important factor to be considered, if an artificial infant food is to be fed to a child, is the bone, or more especially the petrous forming material; that is, the lime salts and phosphates. It is for the teeth that we plead, knowing that if they are duly supplied with the earthy basis, and the other tissues have a well-balanced amount of nitrogenous matter, then it is that we are going to have every tissue well supplied with appropriate pabulum and shall arrive in after years, so far as the teeth are concerned, at the best results.

While human breast milk from a healthy woman, fed as has been intimated above, is the best possible food for a child under one year of age, we believe the next best substitute is an artificial food made with a view of a well balanced condition of the inorganic constituents of lime and phosphoric acid, with as large a proportion of protein substances as we find in Carnrick's soluble food. It is useless to expect the youth or man to have good strong, flint-like teeth, if at the time of their formation the growing tooth germs, and, later on, forming teeth, were deprived of a liberal supply of the lime salts. Feed the mother as well as the child with the lime salts, derived from the coarse cereal foods.

EXAMINATION OF THE PATIENT.*

BY J. J. MULHERON, M. D., PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE, IN THE MICHIGAN COLLEGE OF MEDICINE AND SURGERY.

Gentlemen.—At our last lecture we considered the decubitus, the facies, the skin, and the pulse, as aids to diagnosis of the disease affecting the person for whom medical assistance is required. There remain other aids of value to the diagnostician, and the first of these which shall receive attention at this hour is

The Tongue.—Guided by an intelligence this organ may assist diagnosis by describing subjective feelings, but it has also an inaudible language which is understood only by those especially educated therein, and to them this inaudible language is often more instructive than the articulated words. In practice you will be expected to inspect every patient's tongue, and it will be well for you to know something of what this inspection may reveal. You ask your patient to protrude the organ, and when he obeys your request you will observe the manner of his doing it. Does he protrude it promptly at the first request, or does he put it out slowly and tremulously, and only after the request has been repeated? Does it come out straight, or does it incline to either side of the mouth? Hesitation in protruding the tongue and slowness and tremulousnes of the movement denote mental hebetude and muscular debility. The condition obtains in fevers of a low type and in such nervous affections as are accompanied by debility. Tremulousness of the tongue is also noticed in alcoholism, which is but a condition of muscular and nervous exhaustion due to the prolonged stimulus of alcohol, and is esssntially the condition which we have in the low fevers. This tremulousness usually precedes the symptoms of general muscular exhaustion, and when it occurs early in a case of fever it should admonish us to a course of supporting treatment and stimulants, for it foreshadows a condition of grave depression. When the tongue takes a lateral deflection on protrusion, it indicates paralysis. It is a singular fact that in many cases the tongue while in the mouth inclines to the healthy side, but when protruded it is deflected towards the paralyzed side.

The tongue having been exposed is examined for its volume, its color, its degree of moisture, and the condition of its coating. The tongue is itself liable to disease, but it is only as an index to constitutional conditions that it is now under consideration. A large, flabby tongue with indentations on its sides is common in chronic debility of the digestive organs, and when accompanied with a foul breath should prompt an inquiry in regard to the employment of mercurials. When tooth wounds, or scars, are found on the organ the probabilities are that the patient is subject to epileptic seizures. In acute peritonitis the tongue is generally contracted.

The pale tongue indicates an anæmic condition of the system or an impoverished state of the blood. Cyanosis reveals itself in lividity of the tongue quite as distinctly as in the face and prolabia. In the course of fevers and in the anæmia due to lactation, the tongue sometimes parts with its coating, leaving it of an intensely red color. When in addition to this redness the papillæ are abnormally developed we have the "strawberry tongue" which is so pathognomonic of scarlatina. In diabetes the tongue is usually clean, red and irritable, and in advanced phthisis we sometimes have a raw and red tongue with elevation of the papillæ.

* Abstracted from a Clinical Lecture.

Although dryness of the tongue is usually evidence of a general checking of the secretions, it is also apt to occur through the patient's lying with his mouth open, and this fact must be borne in mind in considering this condition. Excessive and prolonged dryness results in cracking, which symptom is one usually to be regarded with alarm. It indicates both a checking of the secretions and a lowering of the vitality. It is the tongue of the typhoid condition and is usually accompanied by sordes on the teeth and gums. When in the course of a disease dryness is followed by moisture the prognosis has been very much improved. It indicates an "unlocking of the secretions" and a re establishment of nature's effort to rid herself of the incubus of disease.

But the most suggestive signs of systemic disturbance and alteration in the normal conditions of the alimentary canal, furnished by the condition of the tongue are contained in the fur and coating of that organ. Right here it may be well to remark that there is a confusion in the minds of many in regard to what is meant by "fur" and "coating," as applied to the tongue. With many the terms are synonymous, and in published reports of cases there is often much ambiguity on this account. The term "fur" should be restricted to the development of opaque epithelium over the papillæ; "coating," to a deposit of adventitious matter. The furred appearance is due to the development of the epithelium around the filiform papillæ This condition may obtain without actual disease, or the slightest constitutional disturbance, or even the least intestinal or gastric derangement. It is habitual in some persons, who are not conscious of any departure from health. It is barely possible that these have never enjoyed perfect health and are thus not able to judge of their condition as compared with that of those who conform, in this regard, to the perfect standard. They may resemble the woman whose husband had a notoriously offensive breath. When asked by a lady friend how she tolerated the odor, she replied that she had never thought it strange, as she had supposed that all men were alike. In her strict fidelity to her liege she was left without any standard with which to compare his breath. A furred tongue has, therefore, no significance and no importance need be attached to it when present.

The tongue is said to be coated when it is overlaid with a deposit of varying degrees of thickness. This deposit is of a very complex composition: epithelium, mucus, dust particles, bile, particles of food, vomited matter, etc. The fur on the tongue differs from the coating in that it cannot be removed mechanically, it being possible to remove the latter with a scraper.

While the appearance of the tongue is scanned, as a matter of mere habit very often, for the purpose of finding in it some hint as to the systemic condition, it is chiefly for the light which it may shed on the alimentary canal that it is valuable. Local affections of the mouth, tonsils and pharynx act to produce a fur rather than a coating. In acute tonsilitis, particularly, this fur is likely to be an unusually prominent feature, and when but one tonsil is affected the fur is most marked on the corresponding side. In acute catarrhal disturbances of the alimentary canal a coating quickly forms, but there is nothing in it which points to any particular section of the tract as being the seat of disturbance. When tissue deeper than the mucous is inflamed in the alimentary tract, the tongue is most likely not to present either fur or coating, but divested of epithelium it presents a dry, deeply red, raw beef, irritable appearance. This is especially marked in gastritis. In the ulceration of PEYER'S patches, which is the pathognomonic condition in typhoid fever, we have the dry, fissured condition referred to. In chronic constipation the tongue is usually coated, and when the inactivity of the bowel is due to deficient secretion of bile, the natural laxative, the coating is usually of a yellowish color. The correctness of this statement is disputed by some writers, but in practice it will be found that a cholagogue is the most effective remedy for removing this coating. In chronic torpidity of the liver the tongue is always foul

It will be seen from what has been said that the tongue does not furnish a distinct index to the pathological conditions which many suppose it capable of. It is at best but a general guide, that is in so far as the relations of its changes to disease can be described. Experience in reading its characters, however, enables one to draw lessons therefrom which can be taught in no other way. The most that can be done by way of describing its changes and their significance, is to furnish a foundation on which experience and observation must build the superstructure.

In a recent series of lectures a DR. DICKENSON has sought to establish, as a result of observation made in a large number of cases, the relations of the coated tongue to the bodily temperature. They are reproduced for what they are worth and for the further reason that they are the first observations, to my knowledge at least, conducted in this particular direction.

Class of tongue.	Percentage with pyrexia.	Average. temperature.
Stippled	4.9	98.5°
Stippled and coated	8.6	98.7°
Coated, moist	18.7	99.1°
Coated, dry	30.0	99.5°
Strawberry	57.1	102.0°
Plastered	53.1	101.6°

The "furred or shaggy tongue," according to DR. DICKENSON, is generally dry. In a few cases in which it was found moist, the patients were old and suffered from constipation. The dry, furred tongue often occurs when the coated or incrusted tongue begins to shed its excess of epithelium. It is largely the result of absence of friction and moisture. The class of diseases in which it is observed does not present any uniformity.

The "incrusted, dry, and brown tongue" is brown because of lack of moisture. This form only appears in serious asthenic states. It is often spoken of as the "typhoid" tongue, and it is seen in advanced stages of typhoid, as well as of pyæmia, pneumonia, and phthisis. But pyrexia is not necessary to its production. It occurs in comatose states and in cancer, pernicious anæmia, and Bright's disease.

The "bare, red, and dry tongue" is seen as the result of exhaustive discharges, especially of pus, and it is linked with the constitutional state described as hectic. It occurs in chronic diarrhœa and in dysentery, both acute and chronic. It occurs in chronic disorders oftener than in acute, and it may or may not be associated with pyrexia.

The "cyanotic tongue" was found in venous congestion from heart disease, in albuminuria, and in pyrexia.

Correspondence.

SPINAL IRRITATION.

In a singularly confused paragraph on the above subject,* DR. A. J. ROSENBERRY states that the disease mentioned in the title "must be relatively infrequent." Inasmuch as not only whole chapters are devoted to it in every text-book on nervous diseases, and special institutions exist for its treatment on both sides of the Atlantic, it is evident that DR. ROSENBERRY has based his statement merely on his own personal experience with the colleagues of his vicinity. With his so doing I have no desire to quarrel. But I must decidedly object to the serious misrepresentation of my views, which for some reason unknown to me he finds it necessary to make. It seems, because I repudiate HAMMOND'S view that certain clinical signs which the vast majority of writers regard as neurasthenia and spinal irritation are due to anæmia and hyperæmia of the cord, DR. ROSENBERRY regards me as not having a "firm belief" in the "existence of spinal irritation as a distinct affection." How any such conclusion can be drawn from my writings I am at an utter loss to understand. The subject of spinal irritation was not assigned to me by the editors of Pepper's System, and I consequently did not discuss it. I am a firm believer in the existence of spinal irritation and cerebro-spinal irritation; and see cases of these disorders every day,* and have repeatedly in my writings referred to them as a reality. I simply assert that to attribute them to purely circulatory states of the cord is theoretical, and that DR. HAMMOND'S view is not sufficiently supported by facts to justify our modifying our disease nomenclature to accommodate itself to a mere theory.

It may be a matter of "no difference" to DR. ROSENBERRY whether "SPITZKA acknowledges the correctness or not of HAMMOND'S classifications." But he will certainly admit that if SPITZKA has conscientious views as to the responsibilities of authorship, he will admit that he is justified in withholding his assent to views and classifications which he and the majority—in fact nearly all—writers, regard as premature and "not proven." The treatment which has proven so successful in DR. ROSENBERRY'S hands is precisely identical with that instituted by others than DR. HAMMOND. It is not, nor is it so claimed by DR. HAMMOND, his own treatment at all.

E. C. SPITZKA, M. D.
712 Lexington Ave., New York.

*Page 100, Medical Age, 1888.

PLACENTA PRÆVIA.

I had prepared a paper in answer to Dr. A. Collar, on his, to say the least, dangerous treatment of "two cases of placenta prævia," but DR. CHARLES N. VALIN, of Quebec, has given my views, better perhaps than I could, in the AGE of April 26th, and I only wish to be placed in the ranks with him, as against a treatment that must end in death more times than it will bring the patient through. Never tampon after delivery of the child, never let the husband tampon for you, never use the child's head for a tampon, and never attempt to tampon with "the fingers." In short, never do any one thing DR. COLLAR did in his two cases.

R. W. ST. CLAIR, A. M., M. D.
BROOKLYN, N. Y.

A remedy for bed-bugs, employed with great success in hospitals in India, is to place a piece of wood, freely perforated with gimblet holes, under the mattress. The insects find its way into these holes where they may be destroyed by dipping the piece of wood into hot water.

*And more marked and remarkable ones than DR. ROSENBERRY sees fit to publish, which are neither novel nor suggestively interpreted, quite aside from the fact that his first case is one of delusional insanity, and not of spinal irritation. A little classification of some kind would not have injured DR. ROSENBERRY'S article.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., MAY 10, 1888.

Editorial.

THE MEDICAL WITNESS.

It seems to be the average lawyer's chief delight to "tangle up" the medical man whom fate may have brought before him, on the witness stand, and it is notorious that physicians very frequently lay themselves wide open for the attack of the astute advocate, who is, of course, more intent on securing judgment for his client than on having the ends of justice subserved. The doctor in the court-room is out of his element, and he should not attempt to measure swords with the lawyer there. Better, far, wait till he gets him in a position where he may be assailed with powder and pill. These truisms are very generally conceded, but the lawyer is an evil which we cannot always escape, and it behooveth us to study carefully how he may be divested of his sting. In an address recently delivered before the graduates of the Albany Medical College, the HON. MATTHEW HALE, speaking from the tormentor's standpoint, generously let drop some suggestions which, heeded, will protect the tormented against much of the misery they are usually made to endure, when summoned to appear in court. MR. HALE starts out with the declaration that the doctor as a witness is not always a success, and that the most eminent doctors do not make the best witnesses. He has been struck with these facts in the course of his professional experience. But when doctors become "rattled" the fault is their own rather than the lawyer's. A medical witness, like all other witnesses, makes a mistake when he becomes an advocate. He must hew to the line, to the best of his ability, and let the chips fall where they may. Besides being fair, he must be thorough and should refuse to express an opinion without a full acquaintance with the facts. When a hypothetical case is stated he must insist on its being divested of all vagueness and ambiguity.

The medical witness must also be reasonably modest. A conceited witness creates a bad impression. Intelligent men know right well that doctors are not infallible, and when one of your "knowing" ones gets under the fire of a sharp lawyer who has "crammed" for the occasion, he is apt to appear to a disadvantage. It is, therefore, necessary that the medical witness should not, when giving an opinion on a hypothetical case, rely entirely on his own epxerience and observation, but should be prepared, by special study and examination, to meet questions which are apt to be shot at him.

Every lawyer, says MR. HALE, knows how great a diffrence there is between a good and a poor medical witness. Many physicians are so clear, so simple and so intelligent in their explanations to the court and jury, so candid and fair in their appearance upon the witness stand, so evidently masters of the subject as to which they are testifying, and at the same time so modest and unpretending in their demeanor, as almost invariably to carry conviction and to lead the court and jury to adopt their views upon the question as to which they testify. Others are so evidently partisan, give so much evidence of prejudice and feeling, or are so indefinite, so uncertain in their conclusions, so vague in their explanations, that they have very little weight.

MR. HALE'S remarks to the class of graduates were very timely. A physician's standing in a community in which he may have determined to settle may be established or ruined by the manner in which he acquits himself on the witness stand, and the manner in which he should conduct himself under these circumstances should form an important part of his education. The medical witness should know all he is able to know, and when he does not know he should have the courage to frankly admit his ignorance.

WHO FIRST DISCOVERED CHLOROFORM?

This question is again on one of its periodical travels. It was recently tackled by a committee of the Chicago Medical Society, who sent it on its way with the following answers attached:

There are three claimants to the honor of the discovery; LIEBIG, of Germapy, SOUBEIRAN, of France, and GUTHRIE, of America.

Liebig's Claim.—LIEBIG claims to have published his discovery in November, 1831. (See LIEBIG'S Annalen, Vol. 162, p. 161.)

Soubeiran's Claim.—SOUBEIRAN claims to have published his paper on ether bichlorique in October, 1831, in the Annales de Chimie et de Physique.

LIEBIG shows (see LIEBIG'S Annalen, Vol. 162, page 161) that the Annales de Chimie et de Physique was delayed in its publication, and that it did not appear until January, 1832. It certainly is evident that it was not published in October, as it contains the meteorological report for the entire month of October.

Guthrie's Claim.—In the January number, 1832, of SILLIMAN'S American Journal of Science and Art, we find an article by DR. SAMUEL GUTHRIE, dated September, 1831, in which he says: "A bottle and phial containing alcoholic solution of chloric ether. The contents of the phial are as strong as I could conveniently prepare them, but not equal to some which I made not long ago."

In the October number, 1831, of the same journal (page 64, Vol. xxi), we find an article by DR. GUTHRIE, without date, upon a "New Mode of Preparing a Spirituous Solution of Chloric Ether," in which he says: "During the last six months a great number of persons have drunk of the solution of chloric ether not only freely, but frequently to the point of intoxication."

We find a notice to contributors in PROF. SILLIMAN'S journal, in which he says: "Communications to be in hand six weeks, or when long, and especially with drawings, two months before publication day."

DR. GUTHRIE'S paper on chloric ether must then have been in the hands of the printer in July or August, 1831. And if people had drunk of his chloric ether for six months it would place the date of his discovery in the early part of 1831.

We, therefore, conclude that DR. SAMUEL GUTHRIE is justly entitled to the honor of first discovering chloroform, and that the publication of his discovery antedates that of either LIEBIG or SOUBEIRAN.

THE SPECIALIST AND THE GENERAL PRACTITIONER.

DR. LOVE, of the Weekly Medical Review, expresses it as his belief that the time is coming when all general practitioners will be specialists, and all specialists be family physicians, with but few exceptions. Possibly, he says, the eye and one or two other organs will receive the exclusive attention of some workers. Inasmuch as the wish is father of the thought, DR. LOVE'S belief will, we think, be endorsed with a very general and a very hearty "Amen" by the profession. If specialists, so-called and self-styled, were to confine their practice to the subject to which they give especial attention, the growing feeling towards them would, in a measure at least, be mollified. As it is, however, with the possible exception of oculists, specialists do not so confine themselves, but make use of their specialty to advertise themselves into general practice. This, we are advised, is the case generally throughout the country and any exceptions which the cities furnish are exceedingly rare. The matter was the subject of discussion by a party of practitioners in this city a few evenings ago, and the consensus of opinion was that when a general practitioner calls a specialist, as a surgeon, for instance, to perform an operation for him, he loses his position in the family. The public conception of the physician is that he should be able to do everything which his diploma declares him capable of doing, and when he practically acknowledges another practitioner's superiority by calling him in to do a special piece of work, the fact is apt to be interpreted to his disadvantage and to the corresponding enhancement of the consultant in the estimation of the patient. Of course there are specialists and specialists, even as there are men and men, and we can conceive of one whose sense of justice to the attending physician and whose innate gentlemanly spirit will lead him to successfully antagonize the impression which is apt to obtain towards the regular attendant. The rule is, however, for your specialist to delicately, if not indelicately, air his superiority and to encourage rather than to discourage the belief that he is the better man of the two. In the annually increasing competition, therefore, that first law of nature, self-preservation, is pretty sure soon to assert itself in the refusal of the general practitioner to allow the specialist to come in and take the sole charge of the case, and thus relegate the heretofore trusted family physician to the position of a mere assistant. There is, moreover, no sufficient reason why the intelligent family physician, who is competent to assume that important relation, should not himself discharge every duty which he is expected to discharge by virtue of the degree which was conferred on him after the prescribed term of study of medicine and surgery.

A paper read before the Gynecological Society of Boston, by DR. W. SYMINGTON BROWN, and published in the American Practitioner and News, is of interest in connection with the above. DR. BROWN makes a distinction between specialism and especialism. He says:

Everybody, I presume, knows what is meant by the word specialist. I define it as a medical practitioner who, under ordinary circumstances, confines himself exclusively to one branch of our art. For example, SIR SPENCER WELLS is a gynecologist; he might almost be called an ovariotomist: but he was a distinguished army surgeon during the Crimean war, and on one occasion, at a place where no oculist was within easy reach, he successfully operated for cataract.

An especialist, on the other hand, is a practitioner who, while he devotes a large portion of his time to some specialty, is also engaged in general practice. The word is not as well known or as much in use as the other, but, in my opinion, it is likely to become more so. As far as I have been able to ascertain, the great majority of the active members in our society

are specialists. I do not intend to bring forward this fact as a proof in favor of specialism: for the majority is sometimes wrong, and minorities even are not infallible. Let us briefly examine this subject with at least an attempt at judicial fairness.

If we take into account the shortness of human life, there can be no doubt that the specialist possesses an immense advantage over the ordinary physician in the thoroughness with which he may study his department. A conscientious microscopist, like VIRCHOW, may acquire a knowledge of minute pathology quite out of the reach of the country doctor. The specialist, at the outset of his career, has the necessary time for study; and, after he has acquired a lucrative practice, the love of learning may spur him on, and increase of skill improve his powers of observation. The general public and the whole profession reap a portion of the reward resulting from his researches.

But, as a general rule, very few men are qualified to enter this field. Specialists, like poets, are born not made. I have come to the conclusion that especialism would fit more medical workers than specialism. In examining such questions we should never forget that the cardinal principle of medical practice (constituting our right to be) is the welfare of the patient. That is the main goal we aim to reach: if not, we have no claim to the title of physician. All methods involving a subdivision of labor should be tried by this standard: Do they promote the patient's welfare? The chief question between specialists and especialists is not, as DR. H. R. STORER alleges, whether the latter more than the former encroach on the incomes of general practitioners What if they do? That was an incisive remark of DR. COTTING, and likely to become classical, when he lately said that the practice of medicine is the meanest of trades and the noblest of professions. This hits the nail on the head, and drives it home. I am sorry to admit that some regular physicians, from whom better things might have been expected, seem inclined to lower our worthy profession to the trade level; but they will only lower themselves in public estimation.

The spread and encouragement of specialism would better harmonize with the present healthful trend toward more careful constitutional treatment. Medicine has its fashions as well as millinery. To-day the fashion is setting toward common sense. Our valued co-workers, PROF. H. M. FIELD and DR. WARNER long ago pointed out the great importance of attending to constitutional remedies in treating the diseases peculiar to women. I guess that we have at length reached high tide of the surgical flood, and that the ebb has begun. Of course I have nothing to say against conservative, rational surgery. I have always been more of a surgeon than a physician. But "facts are stubborn chiels that winna ding," and loudly proclaim the supreme importance of attending to the general health, while we at the same time treat local affections surgically. It is evident that a practitioner not wholly cut off from general practice—an especialist—is more likely to pay due attention to the chylopoetic viscera, the urinary apparatus, the state of the skin, etc., than a mere specialist who is so absorbed in his own one idea that he is apt to forget the fundamental doctrine of unification itself.

Notes.

THE PHYSICIAN'S LIFE.

Et curate infirmos qui in illa suni.—ST. LUKE.

A noble task His life to imitate,
His life, the Good Physician, the Divine,
Who went about with gentleness benign,
Disease to cure and misery to abate;
Helping all men in whatsoever state,
With heavenly therapeutic oil and wine,
Th' emollient oil, the roborant juice o' wine.

This is our task: Henceforth our path is straight;
Whatever anguish is, or grief or pain,
There be our place, there let us do our part,
Striving to antidote death's deadly bane
By our divine and ever blessed art,
Praying that we by Him be wisely led,
By Him whose mighty power can raise the dead.

—F. BRADNACK, M. D.

THE QUACK DOCTOR.

By love of gain deprived of love's insight,
He knows no law of health nor of disease;
Confounding facts and fables, wrong and right,
His conscience sleeps, lulled in unconscious ease.
The God of nature—nature's healing force—
He understands not, though his coffers fill
From her benignant hand. As a blind horse
That hurries onward, up or down the hill,
To find its manger; so to feed on gain
The quack treads underfoot whate'er may lie
Athwart his path; nor dreams of wealth in vain,
Though one with sin and death, and destiny.

Oh, for a dazzling ray of truth and light,
To smite all falsehood down to endless night.

—EDWARD HOWARD, M. D.

The Crown Prince of Germany shares the popular dislike of English interference with his father's throat. His hostility to the English doctors arises from the fact that he has a shortened humerus, for which he holds a couple of their countrymen responsible. It seems that when

his mother was giving him birth he caused her severe dystocia, and the two English physicians whom grandma Victoria had sent over to attend the case found it necessary to call in counsel, PROFESSOR MARTIN having been selected. The German doctor's back was up and he refused to go, saying if he was not good enough to attend the princess at the start he was not good enough to consult with the imported doctors. The King, however, issued an edict and compelled his attendance. He made version and quickly delivered the princess of her living boy. A few days afterwards one of the English doctors discovered that the child's arm had been broken below the shoulder. Whether he or MARTIN had caused the fracture has never been settled, but the young man affects to believe it was the Englishman, and his shortened arm keeps alive in him his hatred of his grandma's doctors.

There is, says the Lancet, a general impression that times are very hard with medical men. Ours has never been considered a rich or lucrative calling, but, as a set-off, it has been thought that medical men could always contrive to make ends meet; that with them, as with ROBERT LEVETT,

> "The modest wants of every day
> The toil of every day supplied."

Even this is no longer conceded without question, and some critics go so far as to say that the run of medical men live and die very impecuniously. It is not difficult to believe this pessimistic account, and there are many facts which lend a plausibility to it. . . . There are, on an average, 1162 additions yearly to the Medical Registrar, as against the average death of 588 members of the profession, or a yearly surplus of 574, who are to find employment in a community yearly rendered more healthy and independent of the profession by the very efforts of the profession itself. . . . It is certain that the remedy rests mainly with the profession itself. Neither Parliament nor the Medical Council can help us much. The public will take medical men at their own valuation. If sixpence is their charge, they will be called sixpenny doctors, and will deserve to be called so. But such charges will be identified rather with a low style of practice and an inferior quality of drugs than with the great profession whose members have commanded the veneration and respect of mankind.

DR. COTTING, of Boston, in relating his personal reminiscences of fifty year's practice, says: "The greatest number of professional visits to separate houses I ever made in one day was 43 (a few of the houses visited having more than one patient). It was one of the longest days of summer, and there was no time to rest, from early dawn till late at night. I once attended four births, different parts of the town, within 12 hours; between 12:00 at night and 12:00 at noon following. It happened to be a February 22d, and the three boys were each called GEORGE WASHINGTON, while the girl received the name of MARTHA. The mothers were unknown to each other." It will be seen that DR. COTTING can be nearly double discounted by some of our enterprising young western physicians. DR. C.'S statement, however, bears internal evidence of being strictly true.

A report comes from a New England town of the death of a young woman who had just given birth to a child, under the obstetric service of a "Christian scientist," whose only remedy for the post partum hæmorrhage which ensued, was prayer. In the excitement the child failed to receive the necessary attention, and it also died. This latest species of quackery, as sacrilegious as it is impotent, is securing quite a following throughout the country. Several of its exponents have opened out in this city. Fortunately the coroner has not as yet been called to sit in judgment as to the cause of death of any of their patients. This argues well for the intelligence of our citizens. But it will not be long before some such case as the one above alluded to occurs. There will then be the usual locking of the stable door after the horse has been stolen. The Lord will, in answer to prayer, help those who help themselves, and it is criminal to teach the possibility of getting something for nothing (or for the mere asking) even in matters of health.

Syringomyelia (*συριγγοω*, to become hollow, *μυελος*, spinal marrow) is not a new disease, but the name for a pathological condition which is not new, is, probably, not familiar to the generality of practitioners. It is a condition of the spinal cord in which abnormal cavities are present within that organ. It is the subject of an elaborate article in the American Journal of the Medical Sciences, by DR. M. ALLEN STARR. Unfortunately the article closes with the statement that "nothing is known to affect the course of the disease, which may progress slowly, or come to a standstill, or terminate suddenly."

The Texas Health Journal is announced to appear in July. Its editor will be DR. J. R. BRIGGS, formerly associate editor of the Texas Courier-Record. Its prospectus gives promise of the diffusion of such knowledge among the masses as will tend to make obstetrics the only branch of medicine out of which the doctors of the lone star state will be able to make a living. We wish the new enterprise the fullest measure of success, even though the securing of this necessitate its editor's exclusive devotion to literature.

A Pittsburgh chemist proposes an improvement on the crematory as a means of disposing of the dead. It consists of a machine in which the body is first chopped into a pulp which is placed in gas-retorts which, in about six hours, convert it into illuminating gas, water, ammonia, tar and animal charcoal. By subsequent distillation sulphate of ammonia, aniline colors and carbolic acid may also be obtained, and any remnant which cannot be utilized in the arts can be given back to mother earth as a fertilizer. This is certainly very utilitarian, but the total absence of sentiment will prevent the method from becoming popular.

It is announced that the Khedive will not allow DR. GRANT-BEY to go to the International Medical Congress at Berlin as the representative of the Egyptian government. This action is said to be due to an intense enmity which has spruug up between DR. GRANT and DR. GREENE, the sanitary director at Cairo, the latter being exceedingly jealous of GRANT. The Bey is, however, an officer of the Congress, and no green-eyed monster can prevent his attending in that capacity. Delegates will, therefore, not be denied the pleasure of meeting the jovial Egyptian-Scotchman, with his rich Doric accent and his picturesque fez.

DR. GOUVERNEUR M. SMITH has an interesting article in the Medical Record of the 21st ult., on "Wasted Sunbeams—Unused Housetops." The advantages and fascinations of tent-life are universally conceded, and DR. SMITH suggests such a change in the architecture of the modern dwelling as would enable us to secure all these on the housetop. Sunbeams and oxygen are being wasted in our cities, and architects have only to study ancient history and modern science to secure such hints as will be of inestimable importance to the health of the people.

Lavage, or washing out of the stomach by means of the syphon or stomach-pump tube, is resorted to by Washington young men before going to dinner parties. The washing not only increases the capacity of the stomach, but it is said to have a very appetizing effect, besides brightening up the intellectual faculties and creating a feeling of general well-being. The young man is, therefore, thus placed in a condition to play both the hog and the gentleman to his best capacity.

DR. PEAN, a Paris physician, has his coupe so arranged that he can eat, sleep, study and prepare his toilet in it. It is provided with surgical instruments, writing and medical drawers full of notes and a chest for linen and clothes. The demands for his services, it is said, have rendered this means of economizing his time necessary. A man's reputation would have to be very well established in this country, to permit of his doing this and at the same time escape being classed as a mountebank.

The Michigan State Medical Society will meet in this city on June 14th and 15th prox. Arrangements have been made which would seem to guarantee the most successful meeting in the history of the organization. Secretary DUFFIELD has been indefatigable in his efforts to that end, and he has been ably assisted by President MC GRAW, and inasmuch as both of these gentlemen reside here they realize what is expected of the metropolis of the state, by delegates from the "provinces."

A Medical Aid and Co-operative Society has been started in Brooklyn. It has established a graded scale of weekly, monthly and quarterly dues, according to the ages of members and the number contained in the family, and the prompt payment of which is in lieu of fees for all medical services, surgical and obstetrical services not being included. This is the first organized effort in this direction, in this country.

In reply to an inquiry by a correspondent, we would state that the only requisite for a license to practice medicine in this state is the registration of the applicant's diploma with the clerk of the county in which he desires to locate. The clerk is not generally very particular, and we can recall no instance in which anything in the shape of a diploma has been registered.

Puck: They had asked DR. SANDBLAST, the eminent surgeon, to carve the festal fowl, and he stood over it with the carving knife delicately held in the first position." The incision, you will observe, gentlemen," he began dreamily, "commences a little to the left of the median line, and—oh, excuse me, Mrs. Parmalee,—I thought I was in the—*may* I help you to a little of the femur?"

DR. B. has recently lost his beloved wife. A friend in offering him condolence said: "Doctor, you have my heartfelt sympathy; you must suffer grievously." "Yes," returned the heart stricken doctor, "but I took antipyrine according to the method of GERMAIN SEE for hypochondriasis and my grief was instantly relieved."

Tid-Bits: In chemical laboratory: "Professor, what has become of Appleton? Wasn't he studying with the class last year?" "Ah, yes; Appleton—poor fellow! A fine student, but absent-minded in the use of chemicals—very. That discoloration on the ceiling—notice it?" "Yes." "That's him."

Moses appreciated the value of the dry-earth method of disposing of excreta, and under the

regulations which he promulgated every man was to carry a "paddle or shovel among his weapons," with which he was to dig a hole for his excreta, which he was also required to cover up before leaving the spot.

"Professor, what are your views concerning the schools of medicine and theology?" "That depends upon circumstances. When I am slightly ill I am a homœopathist and Unitarian; but when I am very sick I am an allopath and a Calvinist."

The following anent trained nurses is from a homœopath, but it is none the less true because of its origin: "Some trained nurses are trained nuisances. The tongue is the most dangerous thing provided you by nature. Learn to keep your mouth shut."

"Yes, I have called at Mr. Brown's three times a day for a week," pompously declared the young physician. "He is a very sick man, Miss Smith." Miss Smith: "He must be by this time."

A druggist in Lewiston, Me., is said to have received the following order: "Mister Druggist: Please send ipecac enough to throw up a four-year-old girl."

In Buda-Pesth physicians are required to report all cases of abortion, at any period of pregnancy, and to preserve the fœtus and parts for the inspection of the coroner.

Book Notices.

A Practical Treatise on Diseases of the Skin, for the Use of Students and Practitioners. Second Edition, Thoroughly Revised and Enlarged. By James Nevins Hyde, A. M., M. D., Professor of Skin and Venereal Diseases, Rush Medical College, Chicago; Dermatologist to the Michael Reese Hospital, Chicago; and one of the Physicians for Diseases of the Skin to the Presbyterian Hospital, Chicago.
Philadelphia: Lea Brothers & Co.
Detroit: John Macfarlane.

This excellent work on diseases of the skin now appears with such additions and modifications as have been made necessary by the advances and changes since the first edition appeared, five years ago. The work is especially adapted to the requirements of those who have not received a technical education in this particular direction, and whose knowledge of the changes in the skin, induced by disease, is merely such as comes from a familiarity with the principles of medicine—in other words, general practitioners. After a consideration of general symptomatology, etiology, diagnosis, prognosis and therapeutics, a highly instructive section of the book and preparatory to the study of the body of the treatise, the various affections of the skin are considered in detail. The classification adopted is that of the American Dermatological Association, which consists of eight divisions: I. Disorders of the Glands; II. Inflammations; III. Hemorrhages; IV. Hypertrophies; V. Atrophies; VI. New Growths; VII. Neuroses; and VIII. Parasitic Affections. This classification is, probably, the best yet adopted, that of Hebra not excepted. The work as a whole is one which may be unconditionally recommended to the general practitioner.

The Treatment of Pleurisy and Pneumonia. By G. M. Garland, M.D., Instructor in Clinical Medicine, Harvard Medical School; formerly Professor of Thoracic Diseases, University of Vermont; Physician to Out-patients, Massachusetts General Hospital; Physician to the Boston Dispensary.
Detroit: George S. Davis.

This brochure is one of the Leisure Library series, and its appearance during the present unusual prevalence of pneumonia is timely. It aims to give a summary of the present status of the pneumonia question, without argument for or against the theories described. The author is in the fashion, and is committed to the bacillus theory of the causation of the disease, and gives specific instructions for the detection of the microphyte. To such, therefore, as are curious to see the *fons et origo malis* these instructions will prove valuable. The treatment includes a consideration of the latest and most approved methods and remedies, and altogether the little book is both interesting and instructive.

Therapeutic Brevities.

Thyme for Whooping-Cough.—Dr. Johnson, of Washington, says of whooping-cough in the Medical and Surgical Reporter: "In my treatment of this disease, I require my little patients to wear flannel—red or white—next the skin, and be kept in a room well ventilated, the temperature of which should be kept at night, as well as during the day, at about sixty-five degrees in the winter season. They are not allowed to leave this room until restored to health. I direct an ounce of common thyme to be put into one pint and a half of hot water, and boiled down to one pint, and then strained and sweetened well with honey or sugar. In this manner it is made pleasant to the child. To infants I order one or two teaspoonfuls to be given regularly every hour or two, and to children a tablespoonful every hour or two during the continuance of the disease. Should auscultation reveal inflammatory action of the bronchial tubes or lungs, I usually add two drachms each of iodide of

potassium and powdered chlorate of potash to each pint of the sweetened decoction, and direct it to be used in the same manner as the simple decoction. Under the influence of this treatment my little patients pass through attacks of whooping-cough with astonishing ease and comfort, and only on rare occasions have I been compelled to use any other medicines. This treatment is greatly aided by a prudent attention to diet, which should consist of milk and farinaceous foods."

Disinfection of the Hands. — Henry Koplik, in the Annals of Surgery, describes the best method of disinfecting the hands, according to Kummel: The following method was found to give brilliant results and the most perfect disinfection of the hands and subungual space. The nails having first been carefully trimmed and cleaned from visible filth, the hands are cleaned for a minute or a minute and a half with brush and soap, especially the subungual space. The hands are washed in not less than 80 per cent. alcohol for a minute, and then before evaporation of the same they are brought into a 2-1,000 solution of sublimate or 3 per cent. carbolic acid solution, and washed for an additional minute. The advantagrs of the above, are first, the *certainty* of disinfection, the saving of time, the sparing of the hands and finally the cheapness. By the above method either none or only one or two colonies (germs) were found in a culture. It is useful to know that, in order to prevent decomposition of the bichloride in water, the author finds the following a stable solution, and equivalent after months to a solution of sublimate in distilled water, strength one pro mille. To two litres of clean well-water add 10 c.cm. of an alcoholic solution of sublimate (1 in 5) and one gramme of acid aceticum Ph. G.

Treatment of Psoriasis.—In spite of all new forms of treatment introduced from time to time for the cure of psoriasis (some of which have their special application for certain cases), Vidal believes (Jour. de Méd. No. 10) that for the generality of cases we find in the oil of cade a superiority which forces us to come back to it again and again. By its use it would appear that recurrences are less frequent.

The following formula is given:

℞ Glycerole of starch, 100.
Green soap, 5.
Oil of cade, 100.

This makes a soap much more easy of application than the oil of cade alone. It should be applied each night, and a flannel night-dress worn, which is only changed at long intervals. In the morning a bath with tar soap is to be taken, and, if desirable, the odor of the tarry preparation is removed with some perfume.—*Journal of Cutaneous and Genito-Urinary Diseases.*

Acid Bichloride Solution.—Prof. Kronlein, of Zürich, communicates the following formula for an acid solution of corrosive sublimate with salt, to the Correspondenz-Blatt für Schw. Aerzte, No. 4, 1888.

Hydrarg. bichlor. cor., 16 oz.
Sodii chloridi,
Acid. acetici dil (20.4 per cent.) ää 8 oz.
Aquæ, 32 oz.

M. Sig. Ten per cent. corrosive sublimate solution.

This concentrated solution is kept on hand in the shops and clinics, marked with the word poison, in order to quickly prepare the customary $\frac{1}{20}$ to $\frac{1}{10}$ per cent. solutions for surgical purposes. According to Meyer, of Göttingen, it remains clear both in the dark and light, and forms no basic precipitate with strong lime water even after being kept for months.

Puerperal Eclampsia.—Dr. William Goodell in a letter to the Medical Standard, April, 1888, says: "In the majority of cases of puerperal eclampsia, I limit my treatment to chloral hydrate thrown up the bowel. This is repeated whenever twitchings or other premonitory symptoms of recurring convulsions manifest themselves. In plethoric cases I bleed first and then give chloral hydrate per rectum. Whenever convulsions are threatened I either bleed or else give chloral hydrate per os in smaller doses until headache is relieved or until the twitching, double vision or blindness are removed. If labor has begun, I give chloroform, not ether, and deliver rapidly. If labor has not begun, I watch and await events, interfering only when compelled."

Vaginitis.—Vidal has found the balsam of Gurjun one of the best substances in treating vaginiiis. Tampons soaked in a mixture of two parts of lime-water and one of the balsam are introduced within the vagina. Some irritation and burning sensations are at first experienced, but soon disappear. In gonorrhœa Dr. Vidal employs the balsam of Gurjun internally as well.

The following formula is applicable in certain cases of dry eczema giving rise to excessive itching:

℞ Glycerole of starch, 30 grams.
Tannin,
Calomel, ää 1 gram.

The glycerine must be very pure or the preparation will be irritating.—*Jour. de Medicine.*

Medical Progress.

SHEPHERD'S PURSE (*Bursa Pastoris*)—ITS HÆMOSTATIC ACTION.—TH. HUSEMANN, Gœttingen, in Pharmaceutische Zeitung, Feb. 15, 1888, p. 91, says: The article of MR. BOMBELON under the foregoing heading in No. 6 of the Pharm. Zeitung gives me occasion for communicating several historical notes on this German domestic remedy, which give a very instructive illustration of that occurrence which is not at all rare in therapeutics, that a medicinal plant may be forgotten for a half or whole century, and then suddenly again be introduced as something new.

That the hemostatic action, which Bombelon ascribes to the plant, was first accredited to it by German domestic medicine, is a fact. The statement, however, is erroneous, that it has been entirely overlooked by physicians, as will be shown in the following. As everything is repeated in life, it is not to be wondered at that a quite similar error also takes place in that author who first praised the shepherd's purse as an excellent hemostatic, an herb useful in other respects. This was the well-known TABERNÆMONTANUS (1590) in whose new herb book nearly three folio pages are devoted to the bursa pastoris, and who says (in the edition of Casper Bauhin, of 1664, p. 513,): "How this efficacious herb was named by the old teachers, or whether they have described it or not, no one has thoroughly shown, also has no description of the ancients been handed down which may be suited to this herb. We will, therefore, inasmuch as the strength and virtues of noble plant are known to us, thank God our Lord, and be satisfied with the common name." Tabernæmontanus deprecates the theory that the bursa pastoris is "a species of thlaspois," because it "is not so sharp as the thlaspi;" it is not, however, to be doubted that the thlaspi as described by Dioscorides (Mat. Med. 11, 186,) and in Pliny (Hist. Nat. xxviii, 3) refers to capsella bursa pastoris moench, especially as this plant is still called thlaspi in Greece (Billerbeck, Flora Classica). Tabernæmontanus is quite right in stating that in other respects the citations are not perfectly clear. In the description, in the statement of the habitat, there are different readings, according to which it remains dubious whether the seed (more properly, the seed capsule) is to be regarded as lenticulate (phakœides) or disc-shaped (diskœides), or whether we should seek the herb, still occurring on roads and walls, on the ridges of walls or hedges. At all events there remains as a characteristic feature the small seed (capsule) similar to thé nasturtium, which on account of its compressed character is said to have given to the plant the name thlaspi, as is testified to by Galen besides Dioscorides, in his Antidoton (Ed. Kuehn 1, p. 181). Galen ascribes to the fruit a small indenture, of which L. Sprengel says that it without doubt refers to the pod broadening at its apex. The latter also says of Dioscorides' description, "optime quadrat in thlaspi bursam." Interest also attaches to the Latin name of thlaspi mentioned by Dioscorides, the same which Moench, in dividing the plant from the linnean genus thlaspi, gave to the new division, viz., capsella, kapselchen, taschen, as we find therein the classical equivalent for the mediæval Latin bursa, which the naming of the plant by Tabernæmontanus and in the Italian and French synonyms quoted by him, "bursa pastoris, bourse a pasteur, bourse des vergiers" is brought into the same connection with shepherds, which greets us in the German "hirtenthaeschlein," also the Flemish "borsenkenskruyd" permits the bursa to be recognized, also the English shepherd's purse, which corresponds best with our "hirtenthæschlein;" while the Flemish designation corresponds to tæschelkraut, dæschelkraut, sechelkraut, seckelkraut, to which hirtentesch, hirtenseckel, gænskresse and in Suabia "krispelkraut" are to be added.

It is at least a positive fact that there is no reference in Dioscorides to the hemostatic action of the "thlaspi." On the contrary, the thlaspi "forces blood and opens abscesses in the body." In the works of mediæval physicians we find nothing about the shepherd's purse, the plant is even missing in the medical books published by PFEIFFER, in the Gotha Lower German Medical Book, in the Hortus Sanitatis, and other important writings of the Mediæval materia medica. Only in the 16th century, when, as is known, the Paracelsists acquired the treasures of domestic medicine besides the new creations of chemistry, and when attention was given to the indigenous drugs by learned physicians, does the shepherd's purse appear in the works of the "fathers of botany,"—OTTO BRUNFELS, LEONARDUS TRAGUI and TABERAEMONTANUS, who as we have seen, especially praises "the powers and virtues of this noble plant." In T., the "blood" in the internal and external application of the shepherd's purse is always emphasized,—stands at the head and forms the conclusion. The chapter on the internal use begins "shepherd's purse, pounded when fresh and green, the juice expressed, is taken every morning and evening to the extent of 4 or 5 half ozs. (Loth) is of service in the expectoration of blood, in red dysentery and all diarrhœas, in bloody urine and the immoderate flux of women, and besides cures all internal abscesses." In external application, that in bleeding of the nose is worthy of notice: "If one's nose bleeds and the flow will not cease, then give him a handful of shepherd's purse in the hand of the side on which the blood flows; as soon as the herb is warmed the blood stops. Or moisten a piece of cotton in the juice of the shepherd's purse and press it into the nose, or take the herb and press and bind it about the throat. Have several also hold the herb before the eyes of the one bleeding that he may look at it, and this helps. However this herb is used it stops the flow of blood above all other plants." We see that TABERNAEMONTANUS and BOMBELON are at one in this point. But in TABERNAEMONTANUS the effects of the "taeschelkraut" go far beyond the mere arresting of the flow of blood; one can not only heal diarrhœas therewith, but internal ruptures and the natural flow of semen, the bite of poisonous animals, rupture of cattle and of horses, abscess of the eyes, ulcers of the uterus, etc., and loose teeth. T. devotes a special section to the water of the shepherd's purse, aqua stillatitia bursæ pastoris, which is of especial value as a water for wounds, but also for the mouth, and as a gargle.

It is not to be doubted that in the 16th and

17th centuries the bursa pastoris was not only a home remedy, but was also used by the physicians chiefly as a hemostatic. This may also be assumed from what is said by JOHANN SCHROEDER in his well known and comprehensive Pharmacopœia Medico-coymica, of bursa pastoris.

In the Ulmer edition of 1655, before me (iv., p. 31), he says that the larger form (bursa pastors major) is the one ordinarily employed, that the leaves represent the officinal part, and characterizes the drug, in accordance with its properties, as a refrigerant and drying agent which possesses an astringent and obstructive action, for which reason it was of effect in nosebleed, expectoration of blood, diarrhœa, dysentery, bloody urine and excessive menstrual flow. With respect to the external application, he says: Externe vulneribus solidandis a plebejis adhiberi solet, non sine successu, uti et hæmorrhagis rarium."

The remedy then fell into discredit and oblivion. According to RADEMACHER, this due to CARTHEUSER, the well known pharmacologist of Frankfort, A. O. (1796), who removed it from the list of styptics, because it contained no tannin. RADEMACHER then reinstated the burs apastoris, as also the chelidonium, silybum marianum and other old vegetable remedies. It, however, does not stand in the armamentarium of the Rademacherianers as a hemostatic medicament, but, rather, in accordance with RADEMACHER'S own experience in which large quantities of gravel were discharged, as a nephriticum (see Erfahrungs-Heillehre, 1852, Volume 11, p. 361). As such it has also found employment by the deciples of RADEMACHER, and among others KISSEL (BERNHARD'S and LOEFFLER'S Ztschr. fuer Erfahrungsheillehre, Vol. 11, p. 80, 1848) has described a case of strangvry cured by tincture of bursa pastoris. But it was also recommended in this century as a hemostatic. In the Berliner Mediz Vereinszeitung of 1844, No. 2, there is a communicasion of LANGE, in which the preparation is warmly commended in hemorrhages of the uterus of atonic order, in general, and in the immoderate and frequent menses of persons with languid, full constitution, as it was even of service in cases where mineral acids, quinine, cinnamon, iron and other remedies were in vain administered. LANGE employed the form of the decoction, in which one-half ounce and three cups of water were reduced to two, one of which is taken at a time. As a rule, the first cup seemed to suffice. The facts communicated prove that the bursa pastoris is not merely a folk-remedy, but has also been of interest to physicians at various times. I have had no personal experience; but interesting enough is the re-appearance of this "periodical" medicament in the same form under the same conditions to justify these lines. If bursa pastoris is a styptic, it certainly does not owe this property to a tannin constituent, which Cartheser denied to it. Bombelon also refers only to a little tannic acid, but conjectures the presence of sulphocyansinapin or a similar body. But this is to no purpose, for nothing is as yet known of an astringent action in sulphocyansinapin. There is no doubt that allyl oil of mustard is present in the seeds (Plant Substances, p. 798), and it is not impossible that this would come into consideration in the hemostatic action of capsella, for the odor of the herb permits up to conclude its presence in the herb also. That the ethereal oils containing mustard act upon the vessels or vessel nerves, is shown by the striking reddening of the skin, resulting ftom the expansion of the skin vessels. It is, however, to be assumed that a contraction precedes the paralysis and and expansion of the vessels, if small doses are employed, and perhaps the very circumstance that capsella contains only small quantities of such an irritating volatile oil is of importance to the action. As is known, turpentine oil, with similar action, also serves as a hemostatic. Thus far, however, this is all mere theory; it should first of all be determined clinically whether capsella is of any service in hemorrhage. If this prove the case and the extract answers the purpose, then Bombelon will have the honor of having rehabilitated a medicinal plant readily accessible not only in Germany, but perhaps to the whole world. For the shepherd's purse possesses the property of the Plantago Major—to spread with civilization in foreign continents. It has even been found on the Peruvian mountain chains. In view of its history, the plant or weed certainly deserves consideration, particularly on the part of physicians, to whom Rademacher, in the very instance of bursa pastoris, has addressed the words of Paracelsus: "A physician should not be oversighted (hypermetropic), but he should look before him like a maiden; thus he will find a goodlier treasure for all diseases than India, Egypt, Greece and Barbary possess."

THE HYPODERMIC ADMINISTRATION OF STIMULANTS.—The following stimulants have been recommended for hypodermic use: Sulphuric ether, camphorated oil (camphor 1 part, olive oil 9), camphor 1, benzoic acid 1.5, alcohol 12 ethereal solution of camphor (sulph. ether with camphor), liq. ammon. anis., valerianate of ammonia and some other preparations of ammonia, comp. spirit of ether, tinct. musk (musk 1 part, water and oil, alcohol ää 25), brandy and several ethereal oils. The following is the result of the experiences gained by W. ZUELZER in the use of these remedies:

In regard to the selection of the drug it must be premised that none of those mentioned has been followed by any bad symptoms and that the immediate effect of their subcutaneous use on the circulation and respiration, which almost immediately show increased force, with most of them is nearly the same. As the indication is to introduce repeatedly large quantities of stimulants into the system in order to make the effect, which at first is only transient, permanent, it is important to avoid such remedies as much as possible that nray have some secondary effects. Belonging to this class are especially all preparations containing alcohol, because its subcutaneous use, even in small quantities, is not only very painful, but often causes abscesses and sloughing. Similar results, though less intense, may follow the use of the ammonia preparations. Camphorated oil produces the least pain. Its general use is not practicable, however, because the preparation is too bulky and the quantity of camphor contained in it proportionately too small. If a large quantity of it was needed, it would be necessary to use such an amount of oil (ten times as much as camphor) that the skin would

not only become puffed out, but absorption would necessarily be slow.

The subcutaneous administration of caffeine as a stimulant is not to be recommended, as smaller doses are only slightly stimulating, and larger doses are apt to produce irregularity of the heart, vertigo and nausea even in healthy persons. The drug is also almost insoluble in water (1:80), so that its administration requires large quantities of menstruum. Small doses, however, can be given without hesitation and are often very beneficial in hemicrania, in which it acts best by injecting into the arm of the affected side.

For general use, ZUELZER recommends sulphuric ether and ethereal solution of camphor. The latter is prepared in such a way that to the solution some small solid pieces of camphor are added. Both drugs can be used subcutaneously in large quantities. These do not produce much pain. Abscesses and sloughing of skin he has never observed. The administration of these remedies is absolutely without any risk; even the largest doses produce no undesirable symptoms, partly for the reason that the drug very rapidly evaporates from the lungs, as is proved by the distinct odor of ether in the breath. It is best to inject about 16 drops or more under the skin of each extremity, making together 64 drops or more. They can be repeated in 15 minutes at first, but later at somewhat longer intervals.

The most important indications for the hypodermic administration of stimulants are conditions of collapse resulting from a variety of causes, especially if the patient cannot swallow. But even when the introduction of medicines by the mouth is still possible, the hypodermic injection of the same acts by far quicker and more energetically. The first observations in regard to this method of treatment by ZEULZER were made in cases of typhoid fever and cholera. They were conditions of failure of the heart, with a very small, feeble and irregular pulse, cyanosis and rapidly increasing coldness of peripheral parts of the body and often severe collapse. In a very few minutes after the injection the pulse became fuller and stronger, the contraction of the heart more forcible, so that the pulse, which before could hardly be detected, becomes more distinct. The cyanosis often disappears after the first or second injection and the threatened collapse is averted. It is also remarkable that in a number of cases in which the secretion of urine was suppressed, the injections of ether were followed in a short time by copious evacuations of urine. LINDWURM states that in cases of typhoid fever, with constant vomiting this very serious symptom was relieved after stimulating hypodermic injections. Similar good results were obtained by REYHER in a number of cases of Asiatic cholera. LEUBE recommends subcutaneous injections of ether as a very useful remedy to keep up a failing heart in the course of cholera morbus and also in the very serious forms of syncope following intestinal or gastric hemorrhages. In these latter affections this treatment is a great advantage, as it can be introduced into the system without bringing it in contact with the diseased organs. Another indication for hypodermic injection of stimulants is weakness of the heart in cases of pneumonia. JURGENSEN gives camphorated oil in such cases, but there is no reason why ether should not be used.

The hypodermic use of ether deserves especial notice in the practice among children. COHEN obtained very good results from it in a child 7½ months old, who had very severe convulsions, coma and vomiting, probably in connection with a beginning pneumonia. After injecting ten drops of ether in each thigh, these dangerous symptoms disappeared, and though the pneumonia which developed immediately afterwards threatened the child's life, it made a good recovery.

Stimulants have been used quite extensively in obstetrics by the hypodermic method. HECKER gave very large doses even up to 2½ drachms, without ever seeing any local or general disturbances following its use. He thinks that this transient stimulus, which the ether produces, seems to have a specially beneficial effect in anæmic persons. WINKEL and OSTERLOH also praise the usefulness of subcutaneous injections of ether, which they observed in some very desperate cases of collapse. FRITSCH, who reports a case of MACAN, says that everybody who has ever seen the immediate effect following the administration of ether in this way, will never omit it in suitable cases. Of special benefit were they where chloroform had to be administered; the patients become conscious after one to two injections of ether. CHANTREUIL reports five cases of severe metrorrhagia in which he has used subcutaneous injections of ether with success and thinks that they often answer all the purposes for which transfusion of blood is employed. Another indication for this method seems to be in cases of collapse due to poisoning with morphia and chloral; in a number of cases it has been followed by very favorable results. LEVINSTEIN mentions two cases of poisoning, one from morphia and the other from chloral hydrate, both in a state of collapse, which recovered after injections of ether.

As observations on healthy persons show that the secretion of urine is decidedly increased by hypodermic injections of ether, it is natural to recommend it whenever the functions of the kidneys are to be stimulated, at least temporarily. Good effects have been obtained in some cases of dropsy from fatty heart.—*Wiener Med. Blaetter; Pittsburg Med. Review*, April, 1888.

THE USE OF SACCHARIN IN DIABETES.—By CHARLES W. PURDY, M.D.,*—Sufficient time has now elapsed since the introduction of saccharin to permit extended observations of its physiological effects upon the organism, as well as to learn something of its therapeutical properties. This time, happily, has been improved by numerous observers, especially by Stahlman, Salkowski, Stutzer, Adducs, and Leyden, to whom we owe much of our knowledge upon this subject.

We know that this agent is absolutely innocuous to the system, even when administered in sufficient quantity to equal in sweetening power three pounds of sugar a day, and continued indefinitely. The fact that large contracts have recently been made for the supply

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of saccharin for military use, both by the German and the Russian governments, indicates clearly its harmlessness as a flavoring agent for food and drink.

With an agent so harmless, and possessing a sweetening power more than three hundred times that of sugar,* we naturally turn to diabetes as a useful field for its employment; since the deprivation of sugar—always so essential in successfully treating these cases—is often one of the severest trials to the patient in the enforcement of the diabetic dietary. Simply as a flavoring agent saccharin leaves little to be desired as a substitute for sugar, save its sparing solubility. It is, of course, entirely devoid of nutritious properties.

From a liberal use of saccharin in my practice since its introduction I have not yet met with a single instance in which its palatability was suggested as in the least inferior to that of the purest sugar.

The most desirable form for the use of saccharin by diabetic patients is that of the tablet; since in this form a combination may be made—usually with an alkaline carbonate—which renders the saccharin perfectly soluble in water. I have made numerous trials and experiments with the several forms of saccharin tablets at present on the market, both here and in Europe. Most of these have been found quite soluble, but they contain rather an excess of saccharin, which I think in some respects objectionable. From a grain to a grain and a half of saccharin will render a cup of tea or coffee about as sweet as will two lumps of white sugar; and I find that while most patients crave the flavor of sugar, some resent an excess of it, and therefore the tablet must be broken—and consequently in part wasted—in order to get the desired grade of flavor. The tablets I am now using are made for me by Parke, Davis & Co., of Detroit, and contain each 25 milligrammes of saccharin, in the shape of soluble salt, and these give entire satisfaction.

In addition to its use as a flavoring agent for food and drink, saccharin possesses properties that render it valuable as a medicinal agent in the treatment of diabetes. It possesses decided antiseptic properties, estimated by trustworthy observers about equal to that of salicylic acid and thymol. On the other hand, saccharin exerts no action on ptyalin or pepsin, and moreover, it seems to have no secondary action on the digestive secretions—passing unchanged through the organism, to be eliminated by the kidneys, as do benzoic acid and resorcin—imparting its antiseptic properties to the urine.

In diabetes, as is well known, the necessary ingestion of a food mostly of a nitrogenous character often weakens the digestive power of the stomach and flatulent dyspepsia is the result. Now in saccharin we possess an agent that very much retards the abnormal fermentative changes in the stomach; and its tendency therefore is to preserve the food from such changes until the tardy flow of gastric juices finally reaches and digests the whole contents of the stomach—just as does carbolic acid and such agents as relieve flatulent dyspepsia.

We are perhaps justified in looking for another possibly beneficial action of saccharin in diabetes, based upon its antiseptic properties, though thus far our knowledge rests mostly upon a theoretical foundation. When we consider the strong tendency to fermentative action in the blood of diabetic patients, as is evidenced by the frequency of multiple furunculus and anthrax, as well as Kussmaul's coma, we can scarcely resist the conviction that the passage of such an antiseptic as saccharin through the blood—especially in large doses—cannot but have a modifying influence upon these fermentive changes. Theoretically, then, at least, saccharin if given in considerable quantities might be expected to exert a most beneficial influence over those blood changes in diabetes from whence spring complications comprising the most serious and fatal features of the disease.

In brief, then, we are justified in the following conclusions in reference to the use of saccharin in diabetes:

First, that in this product we possess a flavoring agent for food and drink, the palatability of which is quite equal to that of the finer grades of sugar, and may be used by diabetic patients with the greatest impunity.

Second, that through its antiseptic properties it retards the abnormal fermentive changes in the stomach so common in diabetic patients—thus promoting digestion and relieving flatulence.

Third, that while as yet we are without sufficient practical data to judge of its blood effects in large doses to diabetic patients, yet both chemistry and physiology would indicate its use for the purpose of favorably influencing some of the more fatal complications of the disease.—*Journal American Medical Association*, Feb. 25, 1888.

*One part of saccharin can be distinctly tasted in 10,000 parts of water.

TREATMENT OF TYPHOID FEVER.—In an excellent clinic at the Hôpital Necker, in Paris, PROF. PETER recently gave a summary of his views in regard to what he calls typhoid fevers; meaning by this term the different varieties of what is known by the general name of typhoid fever. In this lecture, which is reported in the Bulletin Médical, March 25, 1888, DR. PETER speaks of the change which has taken place in the type of typhoid fever since he first studied it in the days of Chomel and Louis. He rarely sees now, he says, the greatly distended abdomens, the baked tongues, the discharging and excoriated nostrils, the violent delirium and agitation which he formerly saw so often. This fact he attributes partly to the improvement in the hygienic condition of Paris, and the improved sanitary condition of its inhabitants. It is partly due, however, to the modifications which have taken place in the principles govering the treatment of typhoid fever, and the recognition of the fact that its different varieties demand different methods of treatment. He does not commit himself to the microbe theory of the disease or to the theory that it is caused by a ptomaïne or a leucomaïne; he devotes his attention principally to the subject of the fever, and studies what conditions in the latter influence the natural history of the disease, and determine the proper method for conducting the patient safely through it.

His views are so thoroughly in accord with the opinions expressed in an editorial in the Reporter, December 3, 1887, that we call the

attention of our readers to them. PROF. PETER points to the power which the animal organism has to cast out the infecting material which disturbs its functions, and the duty of the physician to abstain from interference so long as this process goes on with reasonable rapidity and success. Bearing this in mind, he warns against any ill-timed effort to restrain the natural attempts at elimination of the poison of typhoid fever, and commends an attitude of expectancy so long as no grave accident of the disease demands active interference.

The conditions which justify non-interference are a reasonably moist tongue, an abdomen in which there is no extreme distension, a skin which is open and naturally moist, and a pulse not much over a hundred. As to temperature, PROF. PETER expresses little concern, and plainly intimates that he does not share the general opinion that its variations indicate the varying gravity of the patient's condition. The line of treatment proper to most cases, he says, is clearly determined by the instinct of the patient: rest is called for by his weariness and exhaustion; diet by his want of appetite; free supplies of water by his thirst. To meet these instinctive demands, he advises rest in bed, milk food, and lemonade, to which moderate quantities of wine are added. The latter supplies at once three important agents: water, an acid, and a stimulant. Of specific medication he recommends only an occasional saline laxative in the shape of a glass of some aperient water—he says Seidlitz-water, which must not be confounded with the artificial water made with a Seidlitz-powder—and a cool enema, or lavement. Quinine he gives only occasionally, and in small doses, using it solely as a nerve tonic

The tenor of PROF. PETER'S opinions might be misunderstood, did he not plainly state that he recognizes the fact that there are cases of typhoid fever which demand more energetic treatment; but he states as well that the majority of the cases are amenable to such an expectant method as is outlined above. And he adds that this would be decidedly preferable, as a routine method to the routine application of any of the recognized systematic methods.

The eminence of PROF. PETER as a practitioner and as a teacher, and his great experience, give unusual weight to his opinions; and those who hold similar opinions may be gratified and encouraged rather than hope to offer any support to them. For this reason we lay his mature and well-digested conclusions before our readers, believing that a careful study of them cannot fail to have a useful influence in guiding any thoughtful medical man to the right way to treat so common a disorder as typhoid fever. —*Med and Surg. Reporter.*

CHLORAL IN DIPHTHERIA—CARBOLIC CAUTERIZATION IN DIPHTHERIA — ANTISEPTIC PROPERTIES OF CARBOLIC ACID—SODIC SALTS IN GYNECOLOGICAL PRACTICE.—Various remedies have been employed in the treatment of diphtheria, but the cures are not in proportion to the remedies vaunted. DR. MERCIER in a paper read by him at a recent meeting of the Société de Thérapeutique reported that he had obtained very excellent results from the use of chloral in this affection. Before giving chloral DR. MERCIER generally administers an emetic, preferably the powder of ipecacuanha. He then gives from 9 to 30 centig. of chloral, in the form of a syrup, every half hour, care being taken to give food and drink beforehand, so as to leave the syrup in contact with the throat. Moreover, the administration of liquids before chloral prevents the latter from giving rise to gastric pains. The drug generally stopped the further progress of the disease, and within 48 hours the false membranes disappear and then an astringent gargle was prescribed. The treatment is, however, only of use in early stages of the disease, and is without benefit when the larynx has become involved.

At a recent meeting of the Société Médicale des Hôpitaux, DR. GAUCHEB read a paper on the treatment of diphtheria by removing the false membranes and cauterizing the throat with a concentrated solution of carbolic acid. He dissolves from 5 to 10 grams of carbolic acid in 10 grams of alcohol, and adds to this solution from 15 to 20 grams of camphor and a small quantity of oil, from which DR. GAUCHER had obtained excellent results in two cases. DR. JAFFROY stated that he employed chloral as a local application for diphtheria, and preferred it to carbolic acid as it possessed more powerful anti-parasitic properties than the latter. He washes the throat with a two-per-cent. solution of chloral and then applies a one-fifth solution to the false membranes which soon disappear. The throat remains ulcerated, and the application of the solution is continued. By this means diphtheria angina is transformed into erythematous angina. He found, however, that this treatment could not be applied to children. DR. BLACHEZ believes that the false membranes may be destroyed in a less painful manner with paraffine oil. In many cases the false membranes continue to develope in the larynx after they have been removed from the throat. DR. GAUCHER remarked that the special object of his treatment was to destroy the false membranes in order to prevent secondary infection. DR. RICHARD stated that the addition of one-half per cent. of tartaric acid rendered carbolic acid much more antiseptic.

Tartaric acid seems to possess marked antiseptic properties, or at any rate it increases this property when combined with other antiseptics. In a note on the antiseptic value of dressings with corrosive sublimate DR. LAPLACE stated that when this salt comes in contact with an albuminous substance, the sublimate is precipitated as an insoluble albuminate of mercury. This takes place at the surface of wounds when sublimated dressings are employed, and the value of the dressing is largely affected thereby. DR. LAPLACE suggests the employment of tartaric acid to prevent this formation of insoluble salts. The following are the formulæ he employs: 1. For washing and irrigating wounds, perchloride of mercury, 1 gram, tartaric acid 5 grams, distilled water, 1,000 grams. 2. In solutions for preparing antiseptic compresses the proportion of tartaric acid should be 20 grams.

In the course of some researches in connection with verifying DR. LUTON'S statements concerning the curative action of sodic salts in cholera, DR. CHERON, the well-known gynecologist and physician to the St. Lazarus (Female) Hospital, discovered that the salts were also very beneficial in gynecological practice. In a note published by DR. CHERON, he stated that

a patient in the above hospital was suffering for two months from severe metrorrhagia, depending upon chronic endometritis with pelvic peritonitis. He employed the following solution in the form of hypodermic injections:

Crystallized phosphate of soda,
Sulphate of soda, ää 6 grams,
Distilled water, 120 grams.

From four to six grams of this solution to be injected into the buttock or thigh once a week. The solution must be prepared on each occasion. It must also be carefully filtered, and only distilled water used, as ordinary water may cause suppuration at the seat of the injection. The injections must be made slowly, and followed by a thorough kneading of the part for several minutes. By this treatment the uterine hæmorrhage became markedly decreased on the next day after the first injection, and after six injections the woman was completely cured, the discharge having entirely disappeared. Encouraged by such satisfactory results, DR. CHERON resorted to the same treatment in eight other cases of pelvic peritonitis, and in four of uterine hæmorrhage caused by chronic endometritis. In every one of the cases rapid and permanent cure was obtained. DR. CHERON does not pretend to explain the *rationale* of the method, but believes that the introduction of alkalies into the circulation increases the systemic metabolism, since LIEBIG has experimentally shown that an increase in the amount of free alkalies in the blood accelerates the oxidation process.—Paris Correspondent *Jnl. Am. Med. Assoc.*

LIEBERMEISTER ON THE TREATMENT OF PNEUMONIA.—A few months ago we presented our readers with a full account of the methods of treatment in pneumonia followed in the chief American hospitals. The subject is one of such practical every-day interest that no apology is necessary in presenting the views of the well-known Tübingen professor, more particularly as his treatment in some points contrasts strongly with American and English practice.

In the Deutsche medicinische Wochenschrift he has been discussing the etiology and symptoms of inflammation of the lungs and pulmonary tuberculosis, and in No. 9 he gives his matured experience in the treatment of the former affection. The possibility of the discovery of a specific he thinks less probable in this than in other infectious diseases, and meanwhile he follows the expectant and symptomatic plan which is based upon a clear conception of the course and dangers of the disease. The majority of deaths occur from paralysis of the heart, in consequence of the increased labor, or from heart weakness, the result of the fever. We have here our indication for treatment; for the first, stimulation; for the second, antipyresis. Abstraction of heat by external cold is preferred to drugs, which are used only when hydrotherapy fails.

Liebermeister does not regard the fever as an unmixed evil, but inclines to the view that it is reactive and conservative, and expressive of the struggle which is taking place with the microbes of the disease. He employs the bath in preference to other methods, and orders one whenever the temperature reaches 104° F. The water may be at 68° F., in which case the patient remains only ten minutes, or the time may be prolonged if the water be lukewarm and gradually cooled. The baths are given preferably after seven o'clock in the evening, as in this way the spontaneous morning remission of fever is increased. During the day, if neccessary, cold spongings are employed. Experience has proved to be groundless the fear of chilling and of increasing the inflammation; on the contrary, the patients breathe more deeply, the expectoration is freer, and the entire system is refreshed and stimulated. No recent statistics are offered, but he quotes his Basle records of 150 cases treated in this way, with a mortality of only 10.5 per cent., against an average of 25 per cent. under older methods during a period of thirty years.

Antipyretic drugs, quinine, antipyrine, and antifebrine, are seldom used, and then only to maintain the action of the bath. Digitalis, which for so many years was looked upon as a substitute for blood-letting, has its uses in reducing fever and supporting the heart. Alcohol is regarded as the most important remedy against the progressive heart weakness. Blood-letting is advised in œdema of the unaffected lung. Cupping is not thought to have any influence in the inflammatory process, but it relieves the pain, a result as well obtained by hypodermic injection of morphine, or by the application of cold.

While, then, on general principles, Liebermeister's treatment of this disease corresponds closely with that employed in our hospitals, his strong advocacy of hydrotherapy, and the striking results which he quotes, should challenge the attention of clinicians. That the method is troublesome and expensive to carry out, should not stand in the way of its adoption in our hospitals, and the recent statements of Brand, together with the experience of the Lyons School, in the treatment of typhoid fever, should arouse an active interest in the method, which heretofore has scarcely received the consideration it deserves at the hands of American physicians.—*Medical News*, April 21, 1888.

VIBURNUM PRUNIFOLIUM IN THREATENED ABORTION.—In No. 6 of the current volume of the Medical Register, I notice a report of the use (by Dr. C. H. Roberts) of viburnum prunifolium in case of threatened abortion, and I am reminded of the following case, which I find in my obstetric record:

I was called, in April, 1886, to see J. H., mulatto, well-formed and in good flesh; twenty-eight years of age; multipara. She had not been pregnant before in three years, having separated from her former husband. She was at this time seven months advanced in pregnancy, and was suffering with severe pains in in the abdomen. The uterus could be felt to harden with each pain, while the os was beginning to dilate. I gave two ten-grain doses of chloral hydrate, twenty minutes apart, with no effect. I then gave the following:

℞ Chloral hydrate, gr. x.
Fld. ext. viburnum, gtt. x.
Water to ʒ j.

Take every half-hour till easy, and continue

at intervals of four hours after cessation of pains.

I left the patient quiet after two doses, and on my return next day gave the following:

℞ Ammon. bromid., ʒ ss.
Ext. viburni prun., f ʒ vj.
Aquam ad. ʒ iv.

M. Sig. ʒ j. t. i. d.

This was continued for a week.

In May, about four weeks from the first visit, I was called again, and found the same condition prevailing, with the most severe pains I have ever seen in a case which escaped abortion. I gave the chloral and black haw as before, and repeated the prescription for ammon. brom. and black-haw, ordering its continuance twice daily until the patient was delivered.

On June 18, 1886, she was delivered, without forceps, of a healthy female child, weighing eight pounds, which is still living and in good health.

In November, 1887, being again in her seventh month, she began complaining of bearing-down pains, and I gave her the prescription for ammon. brom. and viburnum, with the effect of quieting them entirely; and on January 10, 1888 she was delivered of a male child, eight and one-half pounds in weight.

I have used the same mixture in several cases where bearing-down pains are experienced either during the period of gestation or at the menstrual period, and know of no better remedy in either condition.—D. A. RICHARDSON, M.D., Osceola, Ark., in *Med. Register.*

MERCURIC ALANINE IN SYPHILIS.—DR. R. DE LUCCA, Assistant in the Clinic of PROF. FERRARI in the University of Catania, has recently published, in La Riforma Medica, March 22 and 23, 1888, his results with alanite of mercury (mercuric alanine). He was led to make the experiments with this compound after seeing SCHMIEDEBERG'S Compendium der Pharmacologie, in which it is stated that combinations of the oxide of mercury (HgO) with certain amidic acids of the fatty series (acetamide, glycocollamine, asparagine) should act well in the treatment of syphilis; and these preparations have the advantage of being very soluble and easily absorbed. Preliminary experiments on animals showed that mercuric alanine was not very toxic, and caused no local irritation when injected under the skin.

Alanine is α-chloro-or α-bromo-propionic acid, or by heating aldehyde ammonia with hydrocyanic acid and hydrochloric acids, the reactions being precisely similar to those by which glycerin is obtained from the corresponding derivations of acetic acid. Alanine unites with acids, bases and salts. It crystallizes in tufts of hard needles, dissolves in 5 parts of cold water, less easily in alcohol, and is insoluble in ether. When slowly heated it melts and sublimes undecomposed; but when quickly heated it is resolved into carbon dioxide and ethylamine. Nitrous acid converts it into lactic acid.

The alanite of mercury used was prepared in the following manner: 1 part of alanine was dissolved in 20 parts of distilled water, which was then gradually raised to the boiling point; while the liquid was boiling it was poured over a small quantity of the oxide of mercury (HgO?) until it was all dissolved. Then the liquid was filtered and evaporated, the residue crystallized, and a whitish substance, mercuric alanine, was obtained, which under the microscope showed the characteristic needle-shaped crystals, grouped in crosses and tufts. When thus prepared alaninate of mercury is soluble in 3 volumes of cold distilled water; this aqueous solution is perfectly colorless, clear, is changed neither by exposure to air or light, and will keep indefinitely. In dilute solution it will not coagulate albumen; in concentrated solution its coagulating action is limited to causing a cloudiness of that part of the liquid with which it comes in immediate contact. In other respects it has the general properties of other salts of mercury.

In practice DE LUCA used the drug in three different solutions, of 4, 8, and 10 mgrm. to 1 ccm. of distilled water (gr. $\frac{1}{16}$, $\frac{1}{8}$, and $\frac{1}{6}$ to 16 ♏), both for internal and hypodermatic or intermuscular use. It was used by injection in 20 cases (adults); 19 cured, one improved. The quantity used daily on each patient was from 5 to 10 milligrams ($\frac{1}{13}$ to $\frac{1}{6}$ gr.). The average number of days of treatment for each patient was 37.05 days; average number of injections to each patient 27.7; average age of patients 23.2 years. In the case of improvement that was not cured the patient stopped treatment. All the cases were those of secondary syphilitic lesions. The average quantity of the drug used was 228 mgrm. (3.5 gr.) to the patient. Suppuration at the site of injection occurred only 3 times out of all injections, .53 per cent. As regards the duration of treatment, then, mercuric alanine has a slight advantage over the bichloride; as to quantity, it has a decided advantage, being about 22.8 to 42. As to the efficacy of the alaninate, in 12 cases (out of the 20) that could be seen to find if any recurrence had taken place, there was only 1 recurrence in a case of syphilitic papule of the larynx. From this it seems that the alaninate gives more permanent results than other mercurial preparations. Further, in not a single case in which the drug was used by injection was any stomatitis or other unpleasant effect produced.

From a tabulated statement of 20 cases treated by the internal use of the drug, it is seen that for the cure of 10 adults, with secondary syphilis, there was an average of 45.4 days and 641 mgrm. (9.9 gr.) of mercuric alaninate to the patient. Of 10 children treated 1 died on third day. For the cure of 9 children, average age 7.4 months, with hereditary or acquired syphilis, each required an average of 54.6 days and 159 mgrm. (2.45 gr.) Of these cases 6 were seen in from 8 to 9 months after treatment, and there was no recurrence in any one. There was not a single case of stomatitis, and there was only one case of intolerance to the drug on the part of the stomach, which was completely controlled by the administration of cocaine. As regards the internal use of the alaninate, then, it is not to be preferred to the tannate or the phenate in the opinion of DE LUCA, but the easy tolerance of the drug and the excellent manner in which it acts on the syphilis of infants make it an important addition to the list of antisyphilitics. The child that died was only 2 months old, and was in a desperate state when it came under treatment. DE LUCA

claims that the decidedly calmative action of the drug gives an especially happy effect in infants.

While 40 cases may be considered a small number from which to draw conclusions, the good results obtained by DE LUCA show that this preparation of mercury is one well worth trying. Possibly it may be found that it will give good results in the late manifestations of syphilis.—*Jour. Amer. Med. Assoc.* Apr. 21, '88.

ON THE USE OF SUPER-SATURATED SOLUTIONS OF BORIC ACID IN THE TREATMENT OF CYSTITIS.—(Journal de Médecine de Paris, February 12, 1888.) Having read in a previous number of this Journal that it was possible to make a stronger saturated solution of boric acid than four per cent., M. LAVAUX obtained one nearly four times as strong by the following procedure: To one hundred parts of boiling water (distilled) he added fifteen parts of boric acid and one part of calcined magnesia. Allowed to cool and filtered, only a minute portion of the salts were found to be precipitated. This solution he used in three cases of cystitis.

The first case was a patient with tuberculosis in the third stage. He had had a stricture which had been dilated, and marked improvement of the cystitis followed. But at a certain stage the cystitis remained stationary and the urine contained a large quantity of pus. It was at this stage that the super-saturated solution was used. The patient felt severe pains with frequent desire to urinate for two or three hours after, then all symptoms vanished and next day a decided diminution in the quantity of pus was noticed. The ordinary four-per-cent. solution was then used, with an eight-per-cent at intervals of forty-eight hours. The latter was tolerated almost as well as the former. The cystitis yielded completely in five days.

In the second case reported, cystitis in a woman with metritis, the super-saturated solution was only used after the disappearance of the pain and frequent micturitions. A marked decrease in the amount of pus followed. The solution was tolerated much more easily than in the preceding case; the pain was light, and the frequency of micturition only slightly increased.

The third case was one of very severe cystitis, previously treated by cocaine and four-per-cent boric-acid solution. Here, too, a decided diminution of the purulent secretion was obtained, and the pain was not severe. His conclusions are that the super-saturated solution, in its therapeutic effects, is much superior to the four-per-cent. solution, which is too feebly antiseptic. As the stronger solution is somewhat irritating, it is well not to have recourse to it during the acute stage.—*Amer. Prac. and News*, March 31, '88.

TWO NEW TEREBINTHINATES.—PROFESSOR JAMES, in the Lancet, March 10, 1888, calls attention to two new products allied to the terebinthinates: the essential oil of mountain pine and hydrate of terpin.

The former is obtained from the Pinus pumilio (mountain pine) by distillation with water. A crude preparation of the mountain pine is used much at the German spas to impregnate the water of baths in the treatment of rheumatism and gout, and also by inhalation in bronchial affections. The purest preparation is known as "pumiline." It has the odor of fir balsam, is thought to be disinfectant, and is less irritating than other fir oils. The oil may be inhaled in a steam atomizer, ten to twenty drops at a time being mixed with the boiling water, or it may be diffused through water by means of magnesia or talc in the following proportions: forty to sixty minims of the oil, a scruple of magnesia, and one fluid ounce of water. It can be taken internally like terebene, and its effect on the organs is much the same.

Terpin hydrate affords a curious contrast to the other preparation. It has little taste, no odor, is solid and crystallizable, and insoluble in cold water. It is given in pills of two grains each every three or four hours, or in wafer paper, or the hydrate may be dissolved in glycerin and given in the dose of two or three grains to the teaspoonful as a beginning dose. As a tasteless, odorless substitute for the terebinthinates, whose general properties it possesses, it is principally employed.—*Boston Med. and Surg. Journal.*

PUTRID BRONCHITIS SUCCESSFULLY TREATED BY INHALATIONS OF CORROSIVE SUBLIMATE.—Korányi, of Buda Pesth, is quoted by Betz's Memorabilien, Band 32, Heft 7, as having treated successfully a case of putrid bronchitis, complicated by pleurisy and mitral disease, with inhalations of corrosive sublimate, as follows:

Hydrarg. bichlor. corros., ⅙ gr.
Aquæ destill., 3ij ℥j.

Of this solution, five drachms were inhaled morning and night.

Six days of this treatment resulted in a diminution of fever, and in a great improvement in the character of the sputa and the general condition of the patient.

QUEBRACHO IN DYSPNŒA.—Ellis has found the following formula useful:

Syrup of prunes,
Syrup of tolu,
Fluid ext. of quebracho, ää grams 30.
Dilute hydrocyanic acid, gtt. 25.
Sulphate of morphia, centig. 3.

M. S. One teaspoonful, to be repeated if necessary.

—*Jour. Amer. Med. Association.*

THE TREATMENT OF FLATULENT DYSPEPSIA.—The Journal de Médicine of March 11, 1888, gives the following formula:

Bismuth. subnit.,
Magnesiæ pulv., ää gr. 30.
Belladon. pulv.,
Zingib. pulv., ää gr. 3.

Mix carefully and divide into ten powders.

A powder should be taken in peppermint water twice daily.—*Med. News.*

The Medical Age.

Vol. VI. DETROIT, MAY 25, 1888. No. 10.

Original Articles.

PROGRESSIVE SURGERY.*

BY S. C. GRAVES, M. D., GRAND RAPIDS, MICH.

MR. PRESIDENT AND GENTLEMEN: ALEXANDER WINCHELL, in his "Sketches of Creation," describes in vivid language the fire-mist theory of world origin.

How this earth of ours—a glowing orb of incandescent vapors but recently separated from the central mass—developing gyratory motions by subjection to natural law in the shape of continuous and more or less uneven condensation, made the first axial rotation which was to distinguish day from night, and impelled by the power of that mighty nucleus—the central sun—commenced these grand solar revolutions which, to-day, are still ticking the seconds of eternity.

Even from that time and later on, when primæval desolation gave way to organic life and beauty; when buds put forth their tender leaves and "with verdure clad the fields appeared;" when sentient, creeping things first inhabited the earth and gaudy insects sported in the sunshine of the ages, then and now and in the interim there was, and is, and will be ever present, the immutable law of progression —progression in things physical, in things moral, in things theological.

Objects, small or great, arrest our attention as we pause for a moment to consider this matter.

Musing as we stroll through the meadow, the nodding grasses, the little blue-bell, tossing its dainty head in the summer breeze, tell us of progress. Turning over the pages of history, ancient and mediæval, we see the same law applied to whole nations, their origin, their rise, their maturity; alas! their decay and extinction also.

Every billowy wheat-field, every waving field of corn, every vigorous specimen of corporeal manhood glorying in his strength and ruddy health, but who was once simply a multi-nucleated mass of protoplasm microscopic in size, tells us of *physical* progression.

A nerve impression upon a few molecules in the substance of a simple nucleated cell has, by a process of *mental* progression, culminated in the mighty, far-reaching intellectuality of a WEBSTER or a GLADSTONE.

Just so in regard to things moral, ethical and theological or religious.

But coming a step nearer the subject, we see the operation of this law in the arts and sciences also. All grew from germs or rudiments and all are more or less rapidly advancing along lines of improvement, some even approximating perfection.

Speaking directly in regard to medicine, we readily recognize the fact that there was a time when our own science and art wore swaddling clothes. The germ or rudiment of medicine was animal instinct and we observe this fact in operation to-day when "Tabby" hunts the garden o'er for the proper herb to assuage an "inward grief."

Just when medicine left the realms of instinct and became, however primitively, an intelligent practice will never be known.

We detect traces of empiric practice in Asiatic, particularly Chinese, annals as far back as 4,000 years B. C. and in Egyptian records as far as 1,000 B. C.; but the "Ars medica," although in its infancy and during the earlier ages of its existence it was permeated, encompassed and obstructed by the grossest of errors and superstitions, nevertheless struggled through all difficulties and progressed along developmental lines until we see it to-day in all its grandeur.

Surgery, for some time, especially during the early and middle ages, did not rank as high as medicine. This was due, almost entirely, to the lack of correct anatomical knowledge, dissections being prohibited by both custom and popular sentiment, but with the development, later, of the science of anatomy surgery grew and prospered.

During the times referred to, however, it was looked upon with some disfavor and was, to quite an extent, relegated to the "tonsorial artist" as a part of his avocation in life.

The Barber-surgeon to the king cut quite a figure in those times and he not only shaved the royal face and prepared the royal bath, but attended to any slight surgical matters, such as cupping, venesection and the removal of small growths, with ease and expedition. The larger operations, not many in number, were looked after by the regular profession of that day; but it was not until the 18th century that the barber was stripped of his surgical

*A paper read before the Academy of Medicine, Grand Rapids, Mich.

distinctions and placed definitely in the niche which it occupies to-day.

In this connection it will be interesting to state that the great French surgeon of the 16th century, Ambrose Paré, who, later in life, was surgeon to the French king, Henry II, Francis II, Charles IX, of St. Bartholomew fame, and Henry III, was, during his early professional career, a master barber-surgeon. The same Paré who revolutionized surgery by substituting the silk ligature for the actual cautery in the checking of amputation hæmorrhage, thus vouchsafing to humanity a great boon when we realize that, in those times, patients were compelled to undergo surgical operations without an anæsthetic, and to suffer the tortures of having their wounds poured full of boiling oil or seared over with red hot irons to stop the bleeding.

Æsculapian surgery, according to the Theban lyric poet, PINDAR, consisted in the treatment of accidental wounds and ulcers by the application of selected herbs to check hæmorrhage and relieve pain.

There is much doubt as to whether Æsculapius ever had a tangible existence or not. He is said to have been the offspring of a princess by the god Apollo; but as Apollo was merely a personified idea, the physical existence of Æsculapius is rendered quite problematical.

However, whether Æsculapius was only a medical myth or whether, after a material existence, he was deified, the asclepiadæ, whose patronymic is taken from the Æsculapian idea, really did live and practiced surgery as described above.

HOMER, in the 11th book of the Iliad, speaks thus regarding the treatment of a spear-wound by the Greek surgeon, PATROCLUS:

"PATROCLUS cut the forky steel away.
When, in his hand, a bitter root he bruised,
The wound he washed, the styptic juice infused.
The closing flesh that instant ceased to glow,
The wound to torture and the blood to flow."

In regard to the reality of Hippocrates there can be no question. He lived in the 6th century, B. C., and his surgery was a great improvement upon that of the asclepiadæ.

HEROPHILUS, the great Egyptian anatomist and operator of the 4th century B. C., deserves mention as we trace the progress of surgery. His enthusiasm, it is said, was so great that he dissected criminals alive.

Glancing briefly down the vista of years extending from those historic times to the present day, we notice a few prominent names and figures associated with the rise and development of surgery: CORNELIUS CELSUS, the Roman Hippocrates or the medical Cicero, as he is called, who flourished during the reign of TIBERIUS, and, at the same time, CLAUDIUS GALENUS of Pergamus, Asia Minor (afterwards at Rome); PAULUS AEGINETA, a Greek, educated at Alexandria in the 7th century, A. D ; ALBUCASIS, a celebrated Spanish surgeon of the 12th century; AMBROSE PARE, in the 16th century, concerning himself particularly with the treatment of gunshot-wounds, which were new surgical conditions at this time, in regard to the treatment of which no conclusions could, of course, be drawn from the works of the ancients. DOMINIQUE ANEL graces the 17th century with surgical excellence after the French pattern, while the scientific firmament of the 18th century is fairly studded with brilliant surgical stars, as VELPEAU, LARREY and NELATON among the French; POTT and HUNTER among the British; and MCDOWELL and MOTT among the Americans. The 19th century is crowded with men of great parts, skillful, progressive, high-minded and intellectual: SYME, COOPER, KEITH, TAIT, MACEWEN, in Great Britain; LANGENBECK, ESMARCH, ESTLANDER and BILLROTH, in Germany; GROSS, WOOD, AGNEW, SANDS and GUNN, in America.

In this very limited list of distinguished surgeons I would stop short of the mark were I to omit the name of one who, though young and perhaps unknown to some of you, stands as the exponent, in America, of the new surgery of to-day. I refer to DR. ARPAD G. GERSTER, of New York. His has been the lot, with a few others, to roam over territory hitherto unexplored by scientific minds; his, the pleasure of bearing to suffering humanity the "good tidings of great joy" that, by methods and practices now known to be reliable and of ineffable value, hundreds who, under the old surgical regime, annually go down into their graves can be snatched from death's remorseless jaws.

We know that we are dealing with a large question when we speak in this way; but the consciousness that the lives of those dear to us who are now sleeping in the shadow of the cypress might have been saved and we might to-day be listening to the sound of their voices —even the remotest possibility that this could have been done for them and can now be done for others—should stimulate every exertion to test and to prove the truth or falsity of such all-important declarations.

However, this question has passed the point of uncertainty, for the lowered mortality rates and the introduction of successful surgery into regions formerly considered absolutely unapproachable prove that aseptic and antiseptic surgery have done more in the saving of human life and in dashing the hope of that inexorable monster, death, than anything else in their line from the creation of the first sentient organism down to the present day.

The principle of antiseptic surgery was first enunciated by SIR JOSEPH LISTER, only a few

years ago, when he declared his belief in the theory that micro-organic life operated as a cause of suppuration and disease.

The whole subject can be summed up in a very brief sentence—*infection by micro organisms.*

Associated with the new surgery are three comprehensive words: (1) Sepsis; (2) Asepsis; and (3) Antisepsis.

Those who have had the experience in tugging at the linguistic radicles of historic and classic Greece, will readily recognize the etymology of these words, but as a clear idea of the matter which follows will depend upon their being correctly understood, we may be pardoned if we subject them to closer examination.

Sepsis is a Greek word, meaning putrefaction; that is, the decomposition or disintegration of organic (particularly animal) fluids. Asepsis differs from the foregoing, as will be seen, only in the prefix "*a.*" The Greek "*alpha, privative*" has the force of a negative, therefore, when translated, corresponds to the English "*un*" or "*in.*" This word, then, means, literally, a condition of non sepsis. Antisepsis shows the force of the Greek preposition, Ἀντι (*anti*)—"*against;*" thus means, against sepsis. Sepsis means putrefaction; asepsis, the absence of putrefaction; antisepsis, antagonism to—freely, eradication of—putrefaction. Asepsis presupposes the *absence* of infection. Antisepsis presupposes the *presence* of infection.

If we perform a surgical operation in such a manner as to have healing result without a drop of pus, we have done a bit of *aseptic* work. We have prevented the advent of infection and suppuration; but if, when called to see a case, we find it presenting evidences of tissue-disintegration in the shape of offensive, purulent or ichorous discharges, as a result of infection, we are compelled to resort to *antiseptic* measures in order to antagonize, to the best of our ability, the destructive agencies present, as well as their results.

I might add, at this juncture, that some of the leading ideas in connection with aseptic practice discussed in this paper are culled from DR. GERSTER'S late work on the subject, and therefore all honor should be due him as the originator, to a considerable degree, of the principles herein expressed.

If it be true, as DR. GERSTER says, that "the surgeon's acts determine the fate of a fresh wound, and that its infection and suppuration are due to his technical faults of omission," how careful we ought to be not only in thoroughly understanding the causes and nature of infection, suppuration and putrefaction, but also, and more particularly, how to prevent their existence in surgery.

The broad distinction between suppuration and putrefaction should be noticed, suppuration being merely the formation of pus, which fluid is not, as was formerly supposed, simply an enormous proliferation of leucocytes, but, while composed mainly of the white blood discs, is partly a collection of floating connective tissue corpuscles and wandering or embryonal cells, appearing in any particular part of the economy by the irritation at that point of micro-organic life and products.

Putrefaction, on the other hand, is organic decomposition also resulting from the presence and operations of countless myriads of micro-organisms.

The bacteriologist tells us—and we have no reason to doubt the general truthfulness of his deductions—that it requires a *bacillus* or rod-shaped microbe to bring about putrefaction, the chief variety causing this form of retrogressive metamorphosis being the *Bacillus Saprogenes;* but that in the causation of suppuration the active agent is a *coccus—a micro-coccus*—which is an oval or roundish microbe. The chief cocci causing suppuration are: the *Staphylo-coccus Pyogenes aureus* or golden grape-coccus and the *Strepto-coccus Pyogenes* or chain-coccus.

As in the development of putrefaction so also in that of suppuration, three factors are essential, any one of which being absent these destructive processes cannot go on. These factors are: 1. Moisture; 2. Warmth, and 3. Micro-organisms.

Moisture alone, warmth alone, micro organisms alone cannot produce these morbid conditions. Could we render a wound perfectly dry, or, without violating the laws of health, keep it frozen or at a very high temperature all would be well; but these things, as a rule, we cannot do, except in regard to dryness in small wounds where the hæmorrhage being checked and an impervious coating of zinc oxide, bismuth or iodoform applied, the dryness is preserved and healing by first intention follows:

Of necessity, then, the great and, practically, the only thing we can do to render our wounds clean or aseptic is to exclude the microbes.

The important question now is: How can we best bring about this exclusion?

Could we be assured of simple purity—purity in the atmosphere of the operating room—purity as regards the patient's parts and our own persons and instruments, the acme of asepticism would be reached.

Indeed, cleanliness goes a long way in the gaining of satisfactory surgical results, as is exemplified in the practice of many a surgeon not considered a devotee to asepticism.

In the matter of germicides, great advances have been made in the past and, no doubt, will continue to be made in the future; but the best article in this line which we possess to-day is the bichloride of mercury, with carbolic acid a close second. Corrosive sublimate is a deadly poison, of course, and must be used cautiously,

and carbolic acid is also poisonous, but not to such a degree.

At first a plain aqueous solution of the bichloride was employed, but it was found that time worked a change in the drug, especially when used in the impregnation of dressings, the inert mono-chloride, or calomel, being formed. To obviate this error alcoholic solutions were employed, and later alcoholic solutions with the addition of sodic chloride. Improvement followed these innovations and it was found that the permanent germicidal action of the last mixture was excellent when applied to non-albuminous fluids; but when used in connection with discharges or fluids albuminous in character, like pus, lymph or blood-serum, a precipitate of the albuminate of mercury occurred; thus robbing the solution of its efficacy.

Very lately—as late as February, 1888—LAPLACE has reported the result of a series of experiments whereby he shows that a mixture of corrosive sublimate and tartaric acid in the ratio of one (1) part of the former and five (5) parts of the latter to 1000 parts of water, will prevent this change and render even decomposed organic fluids absolutely sterile. (American Journal of Medical Sciences for May, 1888, page 520).

This tartaric acid-sublimate solution, then, which, for short, will be called simply the sublimate solution, and carbolic acid as the sheet anchor germicides, with the glycerite of boroglycerine, the boro-salicylic or Thiersch's solution, sublimate gauze, antiseptic sponges, chromicized cat-gut, aseptic silk, razor, nail-brush, irrigator, drainage tubes (in carbolic solution), safety-pins, gauze or crinoline bandages, Mackintosh, rubber blanket and nest of pans for holding various solutions, make up the aseptic "kit."

If a principle deserve a trial at all it deserves a thorough one. If the aseptic principle, in this case, be a true one, we must succeed in excluding any and all germs, or in paralyzing their activities while present, or failure will be our portion. Half-way measures will not be sufficient and we must be perfect in our technique or expect and not be disappointed by an unsuccessful issue.

We are well aware of the fact that enthusiasts may overstep the limits of common sense in this matter, as in other things, and make a really good practice appear ridiculous. Such a condition of affairs, indeed, is, to my mind, brought about in an article written for one of our surgical journals, the other day, by a rather enthusiastic asseptician hailing from one of our western states. A passage in the article runs in this wise:

"The ideal aseptic operator would very likely be a man who stepped into the operating room directly from a Russian or Roman bath, simply dressed in a disinfected operating-gown and with a pair of sandals on his bare feet."

I might add, by way of suggestion, that it would be well for our friend to discard the formality of gown and sandals also and thus, at one great leap, reach the acme of aseptic excellence. Such ideas, in the life of a busy practitioner, are, of course, absurd; but it can truly be said that the ordinary rules of procedure, under the new principles will not be irksome after a few trials, and we know that they will be followed by results which will more than repay us for the care and time expended.

There are two primary classes of wounds—accidental and artificial or surgical. The former are very apt to be infected when first seen, although frequently they are not. The latter ought never to be.

When called to care for a fresh wound, unless some great emergency be present threatening the life of the patient, such as profuse hæmorrhage, we must remember that infection of the wound may not yet have occurred and with this doubt in mind, must not increase the danger of infection by the careless introduction of an unprepared finger or probe.

Even in a case of quite active arterial hæmorrhage, the Esmarch constrictor or the Spanish windlass will be sufficient, many times, to control all bleeding until permanent attention can be given the parts.

After checking moderate hæmorrhage, if it be present, in this way, the wound is sprinkled with iodoform; a clean towel wrung out of a 1–2000 sublimate solution wrapped about it and the patient conveyed to his home. If he be found at his residence these acts, of course, will not be necessary as the preparations for final manipulations are soon made.

The proceedings from this point resemble those followed out in the performance of a premeditated, aseptic operation, as the removal of a tumor, a herniotomy, etc., and hence one description will suffice for both.

The hands and forearms of the operator and his assistants and the instruments to be used are washed and scrubbed in hot soap-suds, the finger-nails being given especial care with the nail-brush. The instruments are then rinsed in clean water and immersed in a 3-per-cent. aqueous solution of carbolic acid. Corrosive sublimate solutions corrode instruments and should not be used in direct contact with them any more than is absolutely necessary.

The parts about the wound, or in case of a pre-arranged operation the parts in proximity to the lines of incision, should now be douched and when possible, scrubbed with soap and water, and any hair present removed by the razor. A disinfected rubber-blanket is placed in position beneath the region to be manipulated so as to conduct the blood and irrigating

fluid into a tub or refuse-pail properly situated.

The irrigator (a large fountain-syringe answers the purpose nicely) is next prepared for use with the proper solution which should be the sublimate (1 to 1-2 : 3000) unless the absorbing surface be very large in which case THIERSCH'S or the boro-salicylic solution is preferable. At least three pans are necessary and if they are carried with the instrument-satchel we can be sure of their condition as regards cleanliness.

One pan is to contain the instruments in the carbolic solution; another will hold, also in carbolic solution, the aseptic sponges which, by the way, are prepared thus: Immersion for a day or two, in dilute H Cl to remove all calcareous matter present, then after washing away the H Cl immersion in a solution of permanganate of potassium (5 grs. to ℥i aq.) for half an hour. After this they are washed, decolorized by immersion in a solution of oxalic acid (1:50); finally, after thorough washing again, put aside for use in properly stoppered glass or stone jars containing carbolic acid in solution (1:20, Wyeth).

The third pan will hold a 1:2000 solution of the bichloride.

A fourth receptacle containing a carbolized solution should be be at hand also in which bloody sponges and instruments are to be rinsed during the operation before being again placed in their respective pans, thus obviating the nuisance of hunting for instruments hidden in blood-stained fluid.

The hands and forearms of the operator and immediate assistants, and the exposed parts of the patient are now immersed in, or douched with, a 1:2000 sublimate solution for two or three minutes; clean towels wrung out of same applied about the site of the wound, and the operation begins.

The hemorrhage is checked by pressure or, if from a bleeding vessel of any size, by a chromicized cat-gut ligature, which, together with sutures of the same material, will be absorbed and do not need removal. The irrigator is playing all the time. After the main part of the operation is finished the wound is dried, carbolized, rubber drainage tubes inserted and the edges united with interrupted cat-gut sutures (chromicized) or aseptic silk, prepared by boiling for an hour in a 5-per-cent. solution of carbolic acid, the sutures being best applied by means of the Hagadorn needles, the finest in the world.

A word about the drainage-tubes. At the first flush it may seem strange that asepticians, expecting union without suppuration would use drainage tubes. In small wounds they do not use them, but in large, operative ones, where some fault in procedure may have been committed, pus may follow; so also may it appear in lacerated injuries where infection carried into the wound at the time of its receipt is very probable; but where there are masses of tissue devitalized by the wound-producing agency, suppuration, to a limited extent, *will* occur and the drainage tube will thus prevent any retention of fluids which might work harm unless provided for. The drainage tubes should be properly placed so that gravity can operate through them even if we are compelled to make one or more counter openings. They are then cut off flush with the edge of the wound and kept in position by transfixion with a prepared safety-pin at either end.

After the stitches have been placed, a final irrigation through the drainage tubes is made with the solution of $HgCl_2$ (1:1000), the wound emptied of its contents by gentle pressure, the lines of incision dusted with iodoform, a thick layer of sublimated gauze immediately applied or following a strip or two of iodoformized gauze, a sublimated crinoline or gauze bandage put on, and our dressing is complete.

If the edges of the wound cannot be approximated, or if we have been compelled to pack a cavity or two in order to control troublesome oozing; in short, where we are led to expect the appearance of discharges in proper time, it is best to apply a moist dressing, covered with rubber sheeting or mackintosh, in order to retain the moisture of the dressings and the secretions which will come from the wound.

Pausing a moment for a reflection, let me say that we cannot be too careful in the trival things connected with the performance of an aseptic, surgical operation. An apparently unimportant act may be the means of conveying infection to the parts and of destroying all chances for perfect results. Therefore, while engaged in handling living tissues, such things on the part of the operator or his immediate assistants as the wiping of perspiration from the face with the hand, the scratching of the head, the opening of a door, the closing of a window, and above all else the handling and continued use of a sponge or an instrument which has fallen to the floor should be rigidly refrained from. Be mindful of these things.

Every little while, if the operation, be a prolonged one, the hands should be dipped in the $HgCl_2$ solution and the soiled towels replaced by others freshly moistened with the same fluid.

The rule, after dressing wounds in this manner—I refer to those in which exact coaptation can be made—is that we need not remove the dressings for weeks, unless to withdraw drainage tubes and immediately close again under aseptic precautions, and when, finally, they are taken away the wound is healed, the external portions of the cat-gut sutures rattle off and fine, pink lines mark the site of the former incisions.

This paper would be incomplete without reference to the use of cocaine as an element in modern, progressive surgery; we will add that the discovery of the anæsthetic virtues of this wonderful drug, employed in the crude form, for a long time, strange to say, as a substitute for nourishment by the Peruvian indians on their long and exhausting mountain journeys, has wrought a great change in the practice of minor surgery.

Banishing pains as by magic while permitting the uninterrupted continuation of consciousness, the active principle of the *Erythroxylon coca*, by its introduction into medicine, marks an era in the annals of surgery characterized by greater deliberation on the part of the operator, by more thoroughness in detail without the danger or tediousness attending chloroform or ether anæsthesia, and yet it must be borne in mind that cocaine is, comparatively, a new and only partially tried drug, and that reports of its dangerous character have appeared, from time to time, in the journals. In view of these reports, it is well to employ a minimum of the agent, and, when possible, to place a rubber constrictor on the proximal side of the tissue to be invaded in order to prevent general absorption. The incisions being made (or the growth removed), the solution of cocaine escapes with the other liberated fluids.

In conclusion, we can state that, under the elaborated principles set forth above, those scourges of civilization and blotches upon the fair name of surgery: septicæmia, pyæmia, erysipelas and hospital gangrene "fold their tents like the Arabs and as silently steal away." No other resource is left them; for, produced by infection of the system with ptomaine products resulting from specific bacillar or coccal action through intermediate processes of fermentation, their aggressive armies are annihilated and their dreams of conquest fade away.

VERATRUM VIRIDE.

BY J. E. ENGSTAD, GRAND FORKS, DAKOTA.

This plant was known to the Indians as a poison, and used as such both to remove their chiefs, and as an ordeal in their selection.

It was also used by the farmers in the Eastern States to poison birds. As a medicine it was seldom prescribed until the appearance of DR. W. C. NORWOOD'S paper in 1850. From that time it has been used, and also abused, more than any other known drug, quinine excepted. On the nervous system the drug depresses the reflex activity of the spinal cord, and causes extreme muscular prostration. It causes a marked decrease in number and force of cardiac pulsations; this action being due to direct action on the cardiac muscles and its effect on the cardiac inhibitory nerves. Arterial tension is lowered by a decrease of tone in the vaso-motor nerves. It stimulates, then powerfully irritates the mucous membrane of the stomach.

Here we have a powerful medicine and by its use coupled with good judgment it will seldom disappoint the prescriber; it is, however, powerful for harm as well as good. The greatest opponents to veratrum viride in condemning the remedy or neglecting it, forget that the same rule applies to all drugs. They can be used as well as abused.

We all believe in epidemics of disease. We also have epidemics of remedies. One season one certain remedy seems indicated in the majority of cases, while at another it will seldom be found useful. For the last seven or eight months most of the acute febrile cases have manifested the peculiar symptoms indicating the use of veratrum viride, and when prescribed it seems to work with almost miraculous power, and with results that could not be deceptive nor misleading. In tabulating a few cases I do not deny that they might have improved and ultimately recovered with some other remedy, or by simply leaving them to the tender mercies of Dame Nature, who often performs truly wonderful cures if we only let her show her skill.

The drug is undoubtedly indicated where high febrile action is present, when the tissue-waste or metamorphosis are rapid—where some or all of the excretory functions are suspended, when the secretory organs are in a dormant state, or in plain words "clogged up," leaving all the poisonous products from the rapid tissue-waste circulating in the system, depressing the vital centres, poisoning every cell in the body and at last suspend the phenomena of life. The waste products of our bodies are carried away by certain organs. In higher temperature than normal, when more product or refuse is produced, extra work develops for those organs, and that, too, when they are in a condition to do the least, by the congestion of the capillary system. Nature raises the temperature higher to consume the refuse; and if not assisted or relieved the process of dissolution rapidly takes place.

Reduction of temperature in all febrile cases can be produced by any number of remedial agents; but which is the safest and best is for the prescriber to decide. All have their advantages and disadvantages. They all depress the vital centres; and if while depressing the temperature they do not at the same time stimulate the removal of the poisonous material they are harmful. They may arrest the process, but to do this only is like damming the mouth of a river. It does not remove the cause.

The question of micro-organisms or no micro-

organisms has no relation to the curative effect aimed at. The question has been settled that any remedial agent strong enough to prove an antiseptic in the system will destroy the cellular elements of the body. Remove them if possible and a cure is assured. Whether they are the cause or result of the febrile phenomena will probably never be settled.

Veratrum viride influences a separation of the poisonous material by removing from the blood the solids which sustain the inflammatory process and by the removal of the effete matter the product of the inflammation which tends to convert the material into a poison. The cause of the high fever removed, and a cure is assured. WOOD classes it with the safest of the cardiac depressants, and only two cases are recorded by him which proved fatal as a result of its use, as stimulants quickly counteract the effect of the poison. The following are a few of the illustrative cases in which I have employed the drug.

CASE 1.—Ten days after confinement, temp. 105°; pulse 125; bounding and full; tongue large and coated, with a streak in the centre; expression anxious; abdomen tympanitic; bowels constipated. The case manifested all symptoms of puerperal blood-poisoning, with which, I suppose, you all are familiar. The os uteri was opened and a large piece of placental tissue removed. Injections of pure water. Gave a tonic. Next day no improvement. Explored the uterine cavity with negative results. Gave veratrum viride and the case made a rapid recovery.

CASE 2.—Boy age 8, temperature 105°; pulse 140; pleuritic pain in left side; flushed face; anxious expression; lung on left side showed marked dullness; vesicular murmur, at no one place distinctly marked. Bronchial breathing, and expectoration of a glairy mucus. The boy was strong and plethoric, and the disease was of a sthenic character. Gave veratrum viride and in two days no symptoms of congestion remained.

CASE 3.—Young lady with typhoid fever; temperature had ranged from 102⅔° to 105°. About the fifth or sixth day temperature rose and stood all day at 105⅘°. The face had that peculiar dark flush, eyes dull and staring, sensation blunted and dull. Pulse full and incompressible. Subsultus tendinum, terrible stupefying headache. The tongue presented the peculiar appearance of typhoid fever, heavily coated, whitish on edges with a brown streak down the centre. The bowels were very loose and somewhat tympanitic. Veratrum viride was given and in 24 hours the temperature was down to 101° and every unpleasant feature of the case improved. A copious perspiration ensued. The case began to convalesce and by the 14th day the patient was sitting up.

CASE 4.—Mrs. B. was delivered of a child July 2nd. The labor in every respect was normal. July 6th, I was summoned, found a temperature of 105°, pulse full and incompressible. Lochia suppressed. Abdomen enormously distended, and sensitive to the touch. The countenance had that peculiar anxious, scared, drawn expression. The tongue was large and pasty, with a brown streak through the centre. Veratrum viride so changed the conditions that convalescence was established in 48 hours.

A CASE OF HÆMOTHORAX FOLLOWING AN INCISED WOUND OF THE THORACIC WALL.*

BY NORVAL H. PIERCE, M. D., CHICAGO, ILL.

The patient whom I exhibit to you is 19 years old, of healthy parents, and was six months ago in good health.

On July 13, 1887, at 3.30 P. M., while cutting a piece of wood with the stick adjusted against his chest, he accidentally stabbed himself in the third intercostal space, half an inch to the left of the right parasternal line. The knife, which I hold in my hand, presents a sharp blade two inches in length, and half an inch in breadth. After the accident he walked to a neighboring surgery, thinking the wound of little consequence; but when he arrived the loss of blood externally was sufficient to saturate his clothes, and caused syncope.

The doctor prognosticated death in a few hours, and summoned the patrol wagon. At 7 P. M., or 3½ hours after the stabbing, I was summoned. He had received no treatment up to this time. I found the man in the condition of one who has sustained a very serious loss of blood—pale, features pinched, eyes sunken, and pupils widely dilated, surface cold and clammy, impaired hearing, pulse nearly imperceptible and very rapid, respiration sighing. There was very slight external bleeding at the wound, which was about an inch in length. From an inch above the sternum to the lower border of the liver the right side was dull, but at this time the liver was not displaced. No blood was expectorated. I closed the wound antiseptically, ordered an ice-bag for the chest, warm bottles to the lower extremities, head lowered, whisky, half ounce every forty-five minutes, together with ergot, very little liquids, and absolute rest.

For several days after this his life hung in the balance. The pulse improved gradually, but the anæmia persisted, dyspnœa arose, together with great restlessness and troublesome insomnia, and the right pleural cavity remained flat on percussion, the lower border of the liver gradually descended and the heart was dis-

*Read before the Chicago Medical Society.

placed to the left, indicating that the hæmorrhage was slowly progressing. At this time the advisability of enlarging the wound and taking up the bleeding vessel, or searing the lung with PAQUELIN'S cautery, was entertained. But such a procedure entailed great risk and no small amount of uncertainty, the location of the bleeding point being unsettled. These facts, together with that of the patient holding his own, even in a low condition, deterred operating.

Because of increasing dyspnœa I consulted with DR. FENGER as to the advisability of aspirating, under the existing circumstances, and on July 27 a gallon of dark-colored blood was drawn away. This did not cause the dullness over the right thoracic area to disappear, but relieved the difficult breathing and lessened the restlessness and insomnia.

On August 20 I again aspirated, the lower border of the liver being within an inch of the iliac crest. Another gallon was drawn away. Under the microscope the white corpuscles were not greatly increased. Up to this time the temperature had ranged from 100° to 101° Fahr. Afterwards it fell to normal once or twice, but generally the thermometer registered 100° F.

On September 5, diarrhœa set in, and lasted two or three days. Cough developed soon after, with very offensive expectoration. The liver dulness was gradually descending and extreme dyspnœa began. As the fluid in the pleural cavity now contained a marked increase in white corpuscles, I decided to perform the radical operation for empyema. On September 13 this was attempted. At this time there was a marked lowering of his general condition. At the time of the incision I purposed removing one or more ribs, but on account of the alarming manner in which he took the ether we thought it best to be as expeditious as possible. The tissues of the seventh intercostal were therefore simply incised, about a gallon of fluid allowed to escape, and the opening plugged with iodoform gauze. At the end the patient was in a state of collapse, brought on, I believe, by the too sudden escape of the fluid. He rallied, however, and the next day a tube was inserted and the cavity washed with a saturated solution of boracic acid at 100° F., which was repeated every second day thereafter. Fever and cough disappeared on the second day. The washing grew less and less colored, and in a few days the tube was removed.

The case sets forth not so much the innate goodness of conservative surgery, as it does the great tolerance of the thoracic cavity of effusions nearly if not quite equal to that of the abdomen. It also shows what a great quantity of blood may be lost without death, over three gallons being taken away in as many tempos. It likewise shows that the wound from which such a hemorrhage could issue is capable of spontaneous arrest.

As regards the place for the incision, I would say the seventh intercostal space is too low, as after the first week the movements of the diaphragm interfere with the drainage tube.

As you may see, this slight cut an inch in length, with its attendant disasters, has left its mark. The right sholder is depressed one inch. The external circumference of the right side is less than the left.

THE ADDRESS IN MEDICINE.*

BY ROBERTS BARTHOLOW, M.D., LL.D., PHILADELPHIA, PA.†

MR. PRESIDENT AND GENTLEMEN: The last International Medical Congress, in some respects, was the most important of the series. In the discussion of those great topics included within the domain of state or preventive medicine, matters of high interest for all educated people, of the greatest importance to the well-being of society, and that exhibit in the clearest manner the disinterested benevolence of the medical profession, were fully considered. To an unprejudiced observer it would seem that matters of such high interest would receive respectful attention, and such practical benevolence be gratefully appreciated by the great organs of public opinion—the daily newspapers: it must be admitted that it did not prove to be so.

It is a remarkable fact that the proceedings of the Congress were revealed to the universal public in a manner that is not too strongly characterized by the word *flippant.* In explanation of this phenomenon it was said that such is the usual attitude of the press toward the medical profession; that these representatives of current opinion do not take the profession "seriously," but rather view the men, and the work of the Congress, as a comedy performance, to be criticised and laughed over on the same lines. If the great metropolitan dailies stood alone in this attitude, it were the less surprising; but, unfortunately, others participate. No thoughtful observer can have failed to see that such is the disposition of the press throughout the country toward all medical organizations. The same position is assumed by a certain element in American society that delights to be considered "cultured." By these, a physician is a "medico," and the art and science as a profession or business, is no higher esteemed than such shows as Barnum's

* Delivered at the 39th Annual Meeting of the American Medical Association.

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woolly-horse, or Chang the Chinese giant. Recently at a meeting of a medical-jurisprudence society, several members, scientific men, questioned the accuracy of some statements made by the author of a paper who is connected officially with the Coroner's office. For thus presuming to question an official, they were sharply criticised by the Prosecuting ateorney, who happened to be present, and he also chided them in a manner befitting a pedagogue to his naughty boys, rather than members of a scientific body.

The causes of this state of things are not far to seek. Everyone here present must be familiar with them. I purpose only to consider those which have to do with the therapeutic art—the most important.

Not a little of the ignorance, the crudities, the vague theories of the 18th century still linger in the 19th century near its close. It is yet understood by many that the therapeutic art is based upon some *ism* or dogma. "Allopath" and "homœopath" are still bandied about as having vital power, when they were long since relegated to the lumber-room of the past by modern science. Yet we hear of the "new school" and "old school," as if notions brought out near the close of the last century, compounded of the vagaries of HAHNEMANN and the mysteries of MESMER, could still continue guides to practice. The contentions of so-called "schools," the noisy demonstrations of the Thompsonians, and eclectics, and physio-medicales; the rabid water-cure, and the innumerable special cures, have produced in the popular mind a distrust of all systems.

The cry of "new school" has proved the most sympathetic; but the attractive sugar pellets, and tasteless liquids, carry with them their own destruction, for, in the deeper consciousness of men, lies the fatal objection that great results are not to be accomplished by such slender means. Hence, left to its own course, homœopathy has practically died out on the Continent. On this side of the Ocean it still maintains a certain influence, because of social conditions and prejudices that are only possible in free communities.

The success of such wretched peculiarities, such inanities as the homœopathic practice consists of, does more to lower the position of the medical profession than any other cause. The false statistics published as actual fact, accepted as true, and passing unchallenged, are at this moment doing an almost incredible amount of mischief. Two years ago a pamphlet was very widely distributed throughout the West, as a trade document, containing many falsehoods in the way of statements of pretended scientific truths, and fictitious statistics, that placed legitimate medicine in a false position, and discredited its practice to a most serious extent. This pamphlet was issued by a St. Louis homœopathic pharmacy, and was written by a DR. SOMERS, who had been a professor in the facutly of Iowa University, and it had, therefore, an air of authority that materially contributed to its success. The usual tirade against allopathy—its past errors, and its present uncertainties—occupied much of this pamphlet, but its really effective part consisted in statistics made up out of whole cloth. These statistics, it is asserted, were obtained from official publications, and gave the results in numbers of the comparative successes of homœopathy and allopathy, in the cities of Boston, New York, Philadelphia, and others. It was thus shown by pretended official figures, that homœopathic practice is invariably from 30 to 50 per cent. more successful than allopathic.

What answer can be made to such statements, apparently supported by official figures? I am informed by a physician of the best reputation, living in a large city of the West, that this pamphlet was sent to every householder in a considerable town, that legitimate practice was in a short time completely destroyed, and every regular physician reduced to extremity. We need not be surprised. How could any physician answer those immutable figures? Those who suffer from the effects of such misrepresentations are clear that an adequate answer should be made, although the profession is averse to medical polemics—for, wherever this lying paper has gone, the regular practitioner is silenced. Here are the official figures—what will you do about it? It remains unanswered, and is yet doing its work efficiently as a trade circular.

When this pamphlet was brought to my notice, I communicated with the official authorities to learn about the source and probable value of these pretended official figures. I expected to discover manipulations which made the figures tell the story that suited the purpose of the St. Louis drug house; but I was amazed to hear that no statistics of this kind exist at all, that a return showing the effect of a system of practice on the mortality rates had never been made, and therefore never published, and hence the figures in the pamphlet were made out and out. I ascertained on further inquiry that though every aid were given, it would be a matter of infinite difficulty to get such figures, and to assure their accuracy would require an amount of time and trouble that hardly any one could give to such a task.

We cannot but regret that such misrepresentations should go unexposed. No other arguments were needed to demonstrate the falseness of a system maintained by frauds of such a shameless character; but meanwhile the advocates of the system profit by the forbearance of the medical profession in the attitude of maintaining its dignity.

The one remedy for existing ills—and to put the medical profession in its proper attitude as a scienfific body—is to improve the art. How can the application of remedial agents be rendered more certain?

As a teacher of therapeutics for many years, I could not fail to observe that the attainments of the profession in respect to the powers of medicines are not as fully developed as they ought to be. They do not have that familiarity with the physiological powers of drugs which the effective use of remedies demands. It thus happens that the highest percision is not attained. Vague notions take the place of scientific accuracy when such has been the progress in this department, that a considerable degree of certainty should be the rule.

It must be admitted that the acquisition of therapeutical skill has been greatly hampered by the complexity of the materials. The barnacles of a century have been accumulating on the framework, and the new knowledge has been thrust into the crevices of old notions until all is made to appear confused and uncertain.

The subject should be divested of its superfluosities. The list of preparations in the U. S. Pharmacopœia—our only official authority—can be greatly curtailed with advantage. Remedies long in use and of comparatively little value are overloaded with formulæ. The preparations of iron given by the Pharmacopœia are 38 in number, of mercury 25, of rhubarb 15, of aloes as many. One-third of these could perform the duty of all. The botanical and pharmaceutical details are such that to master them would require the whole of the time given to the medical studies. If obtained, such knowledge is of small value to physicians; therefore it should be turned over to the pharmacist, to whom it properly belongs.

It needs no argument to show that to accomplish the best results, not only the remedy in its crude form but its constituents must be accurately known. Whenever an active principle is not available, the most concentrated preparations should be prescribed. In an especial degree is it necessary to have complete information regarding the dosage and action of alkaloids. Let me emphasize in the most positive manner the importance of using the alkaloids and active principles, for by them we have minuteness of dose, singleness of action, and precision of effect.

In these "flabby days," as MR. FROUDE entitles the present time, we must pay deference to taste, and secure the administration of a remedy which in a crude form may be rejected.

Under the name "*dosimètrique*" a system of therapeutics has been brought forward within a few years past, in which the point of departure is the exclusive use of the alkaloids and active principles made into granules. I will not enter into the theoretical notions on which BURGGRAEVE bases his system. DR. VON PENTERGHEM has done me the honor to send me his volume, which contains the dosimetric system fully elaborated, but I do not find that there is any truth which can be considered new, except the form of the medicament. Furthermore, the work is superficial. Dosimetric practitioners are imperfectly acquainted with the physiological action of remedies—their point of departure. This so-called system is, therefore, little more than a name which it was hoped, there is reason to believe, might play the rôle once the fortune of homœopathy.

That to attain to any degree of accuracy the administration of active principles is necessary is obvious enough. Crude drugs have a varying constitution due to climate, character of season, mode of manipulation, and other accidents. A notable illustration of this truth is afforded us in the composition of pilocarpus. It contains two active principles: one *pilocarpine* constant in form and powers; another *jaborine*, variable. The proportion of jaborine found in different lots of the drug pilocarpus varies one from another, and the process of separating is an analogue of atropine, and therefore opposed in the entirety of its actions to pilocarpine, it is clear that the crude drug must be uncertain in its effects and one specimen vary from another in the most radical manner. In this way only can be explained the conflicts of observation first noted; for the alkaloid pilocarpine acts in a uniform manner, and must continue to do so. To obtain the desired results it is clear that the alkaloid and not the crude drug must be used.

There are many illustrations of the same truth: for example, in the actions of cinchona and quinine, opium and morphine, nux vomica and strychnine, etc.

There can be but one basis for the administration of remedies. That must be a true, exact and intimate knowledge of the manner in which they act on the tissues and organs of the body. This knowledge, as it now stands only in part developed, is large, somewhat complicated, but quite available, and will richly compensate all who will master its spirit and form.

It is within a comparatively short period that the study of the physiological action of remedies has been the basis of a scientific therapeutics. The opening of the present century marked the very beginning of this movement, which, even now, is far from maturity. We owe to the genius of MAGENDIE, seconded by the labors of BICHAT, the fundamental principles, and to BERNARD their practical execution. It is a curious fact, that when the foundations of physiological therapeutics were being laid, HAHNEMANN was developing his notion of the spiritual essence in medicines under the tuition of MESMER, who, at that time, was firing the hearts of female Paris with his magnetic force.

To-day, under the title of "New School Medicine," we have this eighteenth century mysticism unchanged and unchanging, whilst legitimate medicine has been continuously developing, under the inspiration of all forms of physical science. To admit that homœopathy had any influence in the shaping of scientific medicine, is to admit its right to a hearing. It had nothing to do with the new forms scientific knowledge was taking; especially not with biology. Physiological therapeutics being the form the art of cure must, of necessity, assume, is there any law or rule which may serve as a guide to practical use? Of this there can be no doubt. The law of antagonism of action is such a guide within its proper range. By this is meant such a balancing of effects that the morbid action ceases. A capital illustration of the action, and of its consequences, is afforded us in the use of amyl nitrite in the relief of that form of angina pectoris with high tension of the vessels, and of fibroid kidney by the use of nitro-glycerin. Here tissue changes are held in check, and ultimately removed, by remedies that oppose the morbid action, or that maintain a balance of effects until the lesions no longer exist.

Besides the antagonism that is direct, there is an antagonism that is similar. That a remedy which has selective action on any tissue will have a curative action in the diseases of that tissue, is a proposition that is generally true. If the therapeutic action is similar to the morbid, the curative effect is in inverse proportion to the closeness of the correspondence.

If there be similarity of action merely, the curative effect is trivial or is entirely wanting. To illustrate: Pilocarpus is the most powerful sudorific we possess; but it is the least effective agent in the arrest of sweating. On the other hand, atropine is the most effective, and this, as all the world knows, dries the skin by stopping the action of the sudoriparous glands. If we place together the physiological agents now used to arrest sweating, we find that they are powerful in proportion to the degree in which they lessen the functional activity of the sweat-glands. Thus we have atropine, picrotoxin, strychnine, and pilocarpine. Such a fact is conclusive against the theory and practice of homœopathy.

Next to the action of physiological antagonism as a means of securing accuracy in our therapeutical methods, must be placed the use of the physical forces. The important one, and that only to which I can allude, is electricity.

Infinite harm has been done to this subject by specialism. It is not yet divorced from charlatanry of the worst sort—the pseudo-scientific. The most serious embarrassment in assigning electricity to its rightful place in our Materia Medica is the complexity of the subject. Unfortunately, no man can use the agent rightly who is unacquainted with its physics and physiology. Within the sphere of its curative action, it is simply unrivalled. That this strong statement is not universally accepted, is due to the fact that this force is not sufficiently studied, and not appreciated because its powers are not utilized. Professional scepticism, added to the ill-repute which comes of inveterate quackery, acts in turn on the minds of patients, and thus prejudice is engendered that constantly interferes with the proper development of the science.

Notwithstanding the scepticism, or the positive unbelief, there are two facts that cannot be explained away or denied—for they rest on the immutable basis of physical truth.

The first fact is, the power of galvanism to affect the circulation.

The second fact is, electrolysis, or electrolytic decomposition.

Late researches have shown that a moderate galvanic current increases the vermicular action of the vessels and thus lessens the amount of blood passing to a part, diminishing congestion. The same law holds good of the faradic current if the parts to be acted on are so situated that the electrodes come in contact with the tissues.

As respects electrolysis, scepticism has no ground of opposition. The same laws that regulate polar action in electrolytic decomposition, must be equally applicable within the body as without, the same substances being acted on. The action of the electrical current on the vessels, the electrolytic decomposition of materials that can be thus acted on, have brought about results not hitherto attainable. Merely as indicating results now of daily procuring, and which, no doubt, receive full consideration in the Sections, I mention only the remarkable effects had in the treatment of pelvic congestion, inflammation and its products, of stricture of the urethra, and similar lesions. Again, in affections of the trophic system, cutaneous diseases, etc., quite a different aspect has been given them by electrical treatment. Nor should one fail to mention the quite remarkable results which have been lately achieved by the combined currents—galvano-faradic.

Will my brethren who practise the obstetric art permit me to ask why post-partum hemorrhage shall not be promptly arrested by the faradic current, instead of by ergot, friction of the abdominal walls, and other reflex stimuli intended to secure uterine contractions?

There is a vast field needing cultivation in the application of hygiene to therapeutics. The comparatively new method of the dietetic treatment of disease offers us remedial agencies which certainly approximate to exactness in method, and surety in result. Time and the

occasion permit me only to offer the merest hints for your serious and wise consideration.

CHICAGO MEDICAL SOCIETY.

STATED MEETING, January 3, 1888.

The President, W. T. BELFIELD, M. D., in the chair.

DR. HENRY GRADLE read a paper on

MORBID NASAL IRRITABILITY.

Morbid nasal irritability, or irritable nose, is a condition of morbid sensibility of the nasal surfaces associated with hypertrophy of the submucous cavernous tissue. The condition has been inadequately described, and is confounded in text-books mostly with chronic catarrh. The best account of it is in MACKENZIE'S article on neuroses of the nose, in the "Reference Handbook of Medical Sciences." Most writers who have described it in the periodical literature consider it principally in view of the distant reflexes to which it gives rise. The local reflexes form the basis of the present paper.

There is first, the vascular reflex. The vascular or cavernous tissue normally developed to a slight extent at the front and rear end of the inferior turbinated bone, is enlarged and augmented, and may appear also on the side of the septum, on the floor of the nose and on the front end of the middle turbinated bone. Through any irritation by dust or chilling of the surface this vascular plexus becomes engorged and if well developed in proportion to the size of the nasal cavity it obstructs the passage. It is the temporary or fleeting character of the obstruction which characterizes the irritable nose, not any permanent narrowing of the passage. Almost invariably engorgement occurs on one side at a time and then may jump over to the other.

Depending upon this vascular dilatation is the second reflex, namely, sneezing. This may attain such a degree as to annoy the patient steadily. With the sneezing there occurs a third reflex, namely, copious secretion of clear mucus, indicating the absence of any inflammatory condition. This irritable nose may lead to reflexes in distant regions as in the eyes, ears, throat or nervous system at large. The irritable nose may be a symptom of some other nasal disease, such as catarrh or the presence of polypi; it can also be caused by large irritated tonsils. But in many cases it exists by itself without any other primary disease to which it could be traced. It is very much influenced by the climate, and patients can get relief by going to the mountains of the West or to the Pacsfic coast.

In the treatment any traceable causes, such as tangible diseases of the tonsils, should first be removed. Quinine relieves the attacks but probably does not cure them. No other drugs have seemed to the writer to be of any service. Where the condition is not symptomatic of another disease of the nose the only cure is the destruction of the cavernous tissue by the galvano-cautery, or in milder cases, by chromic acid. The latter agent is not as reliable as the former. A cure is possible whenever the extent of hypertrophied cavernous tissue is circumscribed, while where it is very diffuse, relief, but not an absolute cure can be promised.

DR. N. S. DAVIS, JR., reported a case of

RUPTURE OF AN AORTIC VALVE.

From the appearance of the specimen I exhibit a diagnosis cannot be made with certainty, but from the history of the case, together with the appearance of the valves, it seems probable that sudden rupture in one of them has taken place.

The history is as follows: On the 17th of November the patient entered Mercy Hospital. He had complained of illness for about four months; prior to that time he had been in good health. Some years ago his hearing began to fail and he lost his employment as a switchman on a railroad on that account. After that he continued to work as a day laborer. Four months previous to entering the hospital he was carrying a heavy load of coal upstairs when suddenly he felt something give way in his left side; he experienced considerable dyspnœa at once, and symptoms of cardiac insufficiency date from that time. At first the dyspnœa was noticeable chiefly on walking or in making rapid movements, but it was sufficient to necessitate his giving up all work. The dyspnœa increased steadily and he became very markedly anæmic, and in addition exhibited signs of general œdema. At the time he entered the hospital there was evidently fluid in the abdominal cavity as well as extensive anasarca of the extremities. He was feeble and so short of breath that he was unable to lie with any degree of comfort, but had constantly to sit, and slept in this position. The pulse was exceedingly feeble, the heart movements very rapid.

My father saw the patient the day after he entered the hospital and examined him before the clinical class. At that time his condition was as follows: In addition to the dyspnœa, œdema and anæmia, a collection of fluid was found in one of the pleural cavities. The lungs were evidently œdematous. There was probably chronic venous congestion of their lower and posterior portion. The movement of the heart was considerably more rapid than normal, its action was feeble, the cardiac sounds were distant and it was suggested that probably there was some fluid in the pericardial sac. In addition there was present over both the

mitral and aortic areas a regurgitant murmur. The area of cardiac dulness was greatly increased in all directions. It was supposed that the heart was greatly dilated and that regurgitation occurred in connection with a lesion of the valves. There was no prior history of rheumatic trouble in the case. It was noticed that the liver was considerably enlarged. A little later in the same day the house physician noticed that the patient was sleeping almost constantly, and that the heart's action was very much more feeble and that the respiratory motions were only eleven to the minute. On arousing the patient the respiratory movements improved somewhat. On the following morning the patient was more drowsy, stupid and sleepy. In the afternoon of that day he exclaimed suddenly that he felt faint, and with a gasp or two was dead.

The post-mortem was made by DR. FRANK ANDREWS. He found a small amount of liquid in one pleural cavity. The lungs were œdematous and quite firm in the lower and posterior parts from chronic venous hyperæmia. The liver was enlarged, unusually hard and full of blood; the spleen normal; the left kidney normal; the right kidney had a slightly adherent capsule. The heart was greatly enlarged. In the pericardial sac there was an ounce and a half of fluid. The heart on section was found to be very much dilated—both the left and right ventricles were dilated. The walls, as you see, are not thickened. On the right side the valves appear normal; on the left side the mitral valves are normal, but the aortic valves are seen to be thickened, especially one of them, whose edge is considerably thickened and somewhat rounded. Nowhere is ulceration or destruction of tissue from that cause to be seen. The valves are not roughened by verrucosities or otherwise. The part of the valve where there is loss of continuity is also slightly thickened. The break in continuity, here seen, occurs in the edge of the valve just where it should be attached to the aorta. If rupture took place necessarily it took place four months before the death of the patient, and naturnally thickening of the torn edges might occur. There is also present in the aorta above the valves small areas of thickening and hardening, evidences of long prior inflammation of its lining. Taking into consideration both the morbid appearances and the history of the case, it is most probable that four months before death, at the time from which the patient uniformly dated his trouble, a rupture of the aortic valve occurred. The valve had prior to this been enfeebled by the changes that had occurred in it incident to an extension to the valves of older endarteritis.

DR. NORVAL PIERCE reported a case of

OPERATION FOR HÆMOTHORAX.

(See page 223).

DR. A. E. HOADLEY: There are some points about the case of hæmothorax that occurred to me while the history was being read that I should like to refer to. I should conclude from the history, that some large vessel was wounded—that would be the inference as the exsanguination of the patient was rapid and extreme, and I should also conclude that if that vessel was in the lung that there must have been expectoration of blood. I do not see how it could have been avoided if the blade of the knife penetrated the lung sufficiently to wound a large vessel—therefore I conclude wounding of the lung. In the situation of that wound, immediately beneath the chest-wall, is the internal mammary artery, a good-sized vessel. The intercostal was suggested, but these are given off from the internal mammary, and in that situation are small, and could not exsanguinate a patient so rapidly and so completely as this patient was in so short a time, so I conclude that the internal mammary artery was the one divided. Then again, it seems to me that it would have have been good practice to have endeavored to secure that vessel; that there was a straight cut through the intercostal muscles, and I think some kind of forceps could have been introduced with a view of compressing the divided ends of the internal mammary artery. After the thoracic cavity was full of blood no harm could have come from the introduction of the instrument designed to compress the divided ends of the artery by the admission of air; provided it had been done antiseptically. I think the hemorrhage could have been controlled by introducing a button into the wound, such a one as would go through the wound with a string attached to it, pushing it into the thoracic cavity, and then by making traction on the string outside, it would have closed the bleeding vessels. This accomplished the subsequent treatment would have been more satisfactory. As far as the tolerance of the pleural cavity of the blood is concerned, there is no difference between the two cavities, abdominal and thoracic. The one can tolerate the presence of blood as well as the other; the one can absorb as large a quantity of blood as the other; they are both serous membranes, identical in character and powers of absorption.

The case given is very interesting and certainly very remarkable. I was very much interested in the history. The patient evidently has good vitality to stand such a strain.

DR. PIERCE: I have nothing special to say in closing the discussion. Of course I might now do a great many things that I did not do at that time. But the man was in such an extremely low condition that anything more would have been out of place. DR. FENGER

was not sure that it was the internal mammary artery. The wound was a slight distance out of its course, about half an inch. Indeed, the character of the hæmorrhage, at least after the first week, is against this as the source. The position of the scar has changed with the sinking of the chest.

As regards the clot being removed, blood does not necessarily clot in the pleural cavity at all, but may remain fluid indefinitely.

DR. W. T. BELFIELD exhibited a specimen of

MUSCLE INFILTRATED WITH TRICHINÆ.

It was a piece of gastrocnemius muscle from the amputated leg of a man now in the Cook County Hospital. Some eighteen years ago this man, then a resident of New York, in company with a number of other individuals ate of some poorly cooked ham and sausage; nearly all of those who partook of this article of diet became very ill within a week, and a large percentage died. This man was very ill for two months, and did not entirely recover for some four months. In consequence of the case the difficulty was recognized as trichiniasis, and an examination of the muscles of those who died confirmed the diagnosis. This man recovered, and during the succeeding eighteen years has enjoyed good health, except that he has at various times, and more particularly during the last six or eight years, suffered from rheumatism in different parts of the body.

This muscle, like all the other muscles of the amputated leg, is thickly studded with trichinæ. By taking a fresh cut surface near the light you can see the little white specks very closely set. These are shown in the microscope to be trichinæ. Pieces of muscle taken are as thickly set with the parasites as is this piece, and inasmuch as these parasites are more numerous in the trunk than in the limbs, we may infer that the number of trichinæ this man contains in his body runs up into the millions. Of course it is not unusual to find muscles studded with trichinæ in individuals who have been in the habit of partaking of raw sausage or half-cooked pork; but it is rare to find them so thickly placed where the history makes it certain they were taken at one time. Very few individuals recover who swallow so many at one time as to produce so numerous a progeny. Those who are in the habit of taking uncooked pork can at different times take a few trichinæ without at any one time suffering from the invasion of so large a number as to produce the acute symptoms of trichiniasis.

The amputation was for disease in the knee-joint, and had nothing to do with the condition of the muscles.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., MAY 25, 1888.

Editorial.

THE AMERICAN MEDICAL ASSOCIATION.

The 39th annual meeting of the American Medical Association, at Cincinnati, on the 8th to 11th inst., inclusive, is, by common consent, voted to have been a pronounced success. The attendance was rather larger than the average, the papers were quite in keeping, and the social features were such as proved the hospitality of the Cincinnati. The success was such as to wring from some of our eastern contemporaries, who have for some years been notoriously "off," an acknowledgment that it was all that could be desired. This acknowledgment is a good omen. When a man acknowledges the worth of an enemy it is a first step towards reconciliation, and we may reasonably expect that next year's meeting at Newport, R. I., will be characterized by a general return to the fold of the eastern "kickers." 'Tis a consummation devoutly to be wished.

As is usual, and, from the very nature of things, inevitable, a vast deal of what transpired at the late meeting was of a character which would not warrant the public journalist in reproducing it, but we are sorry to find the meagreness which characterizes the reports of the Association meeting contained in the Cincinnati papers. In other cities rival papers have vied with one another in the fullness with which they reproduced the proceedings, but in the present instance the rivalry seems to have been in the direction of both meagreness and imperfection. While our ethical requirements would keep all reports from the public press, there was, nevertheless, a decided feeling of disappointment in the nearness to which the newspaper men conformed to these requirements. Moreover, only an insignificantly small number of the distinguished gentlemen in attendance succeeded in securing the reproduction of their handsome and intellectual faces for the delight and edification of the denizens of Porkopolis. Cincinnati is at best but a very backward town, and its newspaper press is but a reflex of the antiquation of its denizens. It will be many years before there will again be so many pearls cast before its swine.

The Many Medical Colleges.—The limits of our space would prevent a detailed report of the late meeting, were we able even to convince ourselves that our readers would be grateful for it, and we must be content to refer only to such matters as we may consider of most importance. Commencing with the address of PRESIDENT GARNETT, we find it chiefly devoted to a consideration of the somewhat threadbare subject of medical colleges, and the effect of their number on the standard of medical education and the supply of doctors. The title of DR. GARNETT'S address was The Mission of the American Medical Association, and as he sees in the numerous medical colleges of this country, a menace to both the public and the profession, holding them responsible for the inferior quality and the large numbers of the recruits which are annually added to the ranks of those who feel it to be their mission to relieve (in the two fold sense of the word) poor suffering humanity, he argues it to be the mission of the Association to choke off these colleges. His remedy is such legislation as will reduce the number of existing medical colleges, and he urges the appointment of committees for each state, charged with the duty of securing such legislation from the respective legislatures. DR. GARNETT is a resident of Washington, D. C., and is, doubtless, an excellent practitioner, but it is to be hoped that future gentlemen whom the American Medical Association may honor with the highest office at its disposal, may infuse into the addresses which they are expected to prepare, a little more of the leaven of common sense, as well as of science. The evil which he beholds is largely a figment of his imagination, and the remedy which he suggests is chimerical in the extreme. Before the profession can be brought to concede that it is going to the "demnition bowwows," it will demand something more than the unsupported statements of even the most elegant of old gentlemen, and when it is forced to the concession it will adopt some other remedy than the appointment of committees. Who but the veriest simpleton in the practical affairs of this modern life, could hope that the committees suggested by DR. GARNETT could affect the legislation which the worthy President fondly dreams of as a panacea ?

DR. GARNETT'S proposition that the number of the medical colleges of this country is a great evil, is, by no means, self evident, any more than would be the proposition that the number of the varied manufactories of the country threaten commercial ruin. There is an unalterable law of supply and demand, and when the demand fails the supply will be shut off—will shut itself off. The increase of the medical colleges of this country during the past quarter of a century, is not out of proportion to the increase of population, and it has been by no means proven that there are more students because there are more colleges. The effect of more colleges is to divide up the larger classes which were formerly the boast of some institutions; and who will maintain that such division is not beneficial? DR. GARNETT will himself scarcely admit that a teacher can as successfully teach a class of 500 as he can a class of 50. The American Medical Association is, moreover, the representative of the American medical profession, and the vast majority of the delegates to whom DR. GARNETT read his platitudes, entered the profession within the past twenty years, the period characterized by the increase of medical colleges complained of. Will DR. GARNETT preeume to declare that the quality of the Association as it stands to-day, is inferior to what it was when he was a professor in the National Medical College? We are annually treated to dissertations on the growing importance of the American Medical Association and the improving quality of the work which it does, and DR. GARNETT himself declares that the work of the late International Medical Congress (nine-tenths of the members of which were American physicians) was "equal, if not superior, to the work of any preceding medical congress," but with singular inconsistency the gentlemen who come down to us from the earlier years of the century persist in bemoaning the degeneracy of these latter days. The stream can rise no higher than its source, and the American Medical Association comes directly from the same medical profession which, we are told, is being debased by the multiplicity of its colleges. The Association, it is needless to say, took no action on the President's paper.

Address on General Medicine.—This was delivered by DR. ROBERTS BARTHOLOW, of Philadelphia, before the general session. We reproduce it in its entirety on page 224.

Address on Surgery.—This address, also delivered before the general session, was by DR. E. M. MOORE, of Rochester, N. Y. After giving a history of the progress of modern surgery, it dwelt quite exhaustively on questions of contemporaneous interest. DR. MOORE'S views as to the selection of the site for the amputation of the gangrenous limb, differ from those currently held by surgeons. He advises that the cut be made at the line of demarcation, after the manner of the ancients, instead of higher up through healthy tissue, as is the common practice. When the red line forms, nature, he says, has effected the amputation and the danger which remains is from absorption of the septic matter in contact with the stump. He points out the advantages attending separation at this line, and among these are the fact

that there are no vessels which require ligating, less shock than in cutting through sound tissue, and no danger from hæmorrhage. The wound being necessarily an open one, closes slowly, but the application of solution of mercuric bichloride on absorbent cotton, keeps it clean. When the location is such as would render a good stump possible by this method, amputation higher up must, of course, be practiced.

The use of antiseptics has, according to DR. MOORE, robbed gunshot wounds of many of their terrors, and made the peritoneum no longer a membrane which the surgeon dares not touch. It is not in the wound of that membrane that the danger so much lies, but in the contact of it with dirt. Cleanliness is the secret of success in abdominal surgery. Gunshot wounds of the intestines formerly almost necessarily fatal and treated expectantly, are now, thanks, chiefly, to the experiments and observations of DRS. PARKES and SENN, of Chicago, treated with a bold hand and are no longer regarded as without hope of recovery.

DR. MOORE referred to his experience of fifty years before when, as a student, he witnessed the first operation on the tendo Achilles on this continent. It was performed by PROF. MUTTER, of Philadelphia, in the face of the most strenuous opposition of his confreres, and especially by DR. JOHN RAY BARTON, who was by common consent recognized as the surgical chief of the city. Subcutaneous tenotomy, however, soon won the day, and soon strabismus, torticollis and all contracted muscles came under the surgeon's knife. Antisepsis is the legitimate descendant of the subcutaneous cut.

Continuous warm-water irrigation, DR. MOORE believes to be a most effective means of preventing sloughing after operations for resection of joints. He had found the treatment of caries by injections of a solution of hydrochloric acid, of strength of one to twenty, highly successful. The strength need not alarm any one. The agent removes the dead bone and does not injure the living, is free from irritation and is withal an excellent antiseptic.

The remainder of this really valuable paper is devoted to sounding the praises of antisepsis, the possibilities of which seem large. Are we to see a stream of distilled water, rendered properly saline, carried into and out of the peritoneal cavity long enough to insure cleanliness? Are we to irrigate the surface after inflammatory exudates have actually disappeared?

Drug Exhibitions.—The meeting was singularly free from the disturbing influence of ethical discussions, the only question to cause a ripple on the otherwise placid surface being a resolution instructing future committees of arrangement not to concern themselves with the provision of quarters for the display of pharmaceuticals and the wares of the various manufacturers who are wont to embrace the opportunity afforded by the Association meetings, to bring themselves more prominently to the notice of the profession. It was argued that these exhibitions operated to distract the attention of members from the proper object of their assembling, both through the actual time consumed in examining the goods and the well-known importunity of the gentlemen in charge. The class of goods, moreover, which have of late years succeeded in securing the quasi endorsement of the Association through their admission to these exhibitions, have not always been such as consist with the codical restrictions. So long as the displays embraced purely pharmaceutical products, and such articles and devices as harmonize with the requirements of the Code, they might properly be regarded as of educational value. When, however, as has been the case of late years, the exhibition rooms have been largely given over to patented, proprietary and copy-righted medicines and devices, members to whom the code is not a mere sounding brass or tinkling cymbal, began to grow restive, and the resolution was an expression of their feeling in the matter. But the Association was not prepared to take action thereon this year, its well-known conservatism preventing a direct vote without further time for consideration. The resolution was accordingly laid on the table, whence it will, doubtless, be removed for final disposition next year.

The following were the officers elected for the ensuing year:

President: W. W. Dawson, of Ohio; *First Vice-President:* W. L. Schenck, of Kansas; *Second Vice-President:* Frank Woodbury, of Pennsylvania; *Third Vice-President:* H. O. Walker, of Michigan; *Fourth Vice-President:* J. W. Bailey, of Georgia; *Treasurer:* R. J. Dunglison, of Pennsylvania; *Secretary:* William B. Atkinson, of Pennsylvania; *Librarian:* C. H. A. Kleinschmidt, of the District of Columbia; *Trustees* (to fill vacancies): E. M. Moore, of New York; J. H. Hollister, of Illinois; and J. M. Toner, of the District of Columbia; *Members of the Judicial Council:* W. A. Phillips, of Kansas; A. M. Pollock, of Pennsylvania; W. C. Vanbibber, of Maryland; J. F. Hibbard, of Indiana; C. S. Wood, of New York; J. M. F. Gaston, of Georgia; W. H. O. Taylor, of New York; and G. L. Porter, of Connecticut; to deliver the Address on General Medicine at the next annual meeting: William Pepper, of Pennsylvania; Address on General Surgery: P. S. Connor, of Ohio; Address on State Medicine: W. H. Welch, of Maryland.

Medical Progress.

QUEBRACHO IN THE TREATMENT OF DYSPNŒA.—In a copy of the Thérapeutic Gazette, the date of which I do not now remember, appeared in an article setting forth the good effects of quebracho (Aspidosperma quebracho) as a remedy for dyspnœa. The article attracted my attention the more forcibly from the fact that I had some weeks previous experienced a great deal of trouble from a case in which dyspnœa was the prominent symptom, and had found nothing that gave permanent reliief The article referred to gave such glowing accounts of the efficacy of the new drug in dyspnœa from any cause, that I determined to procure a sample and give it a thorough trial in the first case coming under my observation. I accordingly wrote Parke, Davis & Co., who sent me a small quantity of both the solid and fluid extracts, sufficient to test its merits. That was five or six months ago, and since then I have used the drug in several cases, and with such uniformly good results that I feel constrained, for the benefit of my brother practitioners, to report my experience in its use, which has been such as to give me great confidence in its efficacy. In the "Working Bulletin" on this drug, sent out by Parke, Davis & Co., I find that a few observers report disagreeable effects, such as "headache, partial unconsciousness, dizziness, and copious salivation," following its continued use for any considerable length of time. These unpleasant secondary symptoms I have not observed in any of the cases in which I have used the drug, although prepared to encounter them by the experience of others. It is very probable that the size of the dose and the manner of exhibiting it have much to do with the production of these untoward effects, and that a proper regulation of these would enable us to obviate them entirely.

The statement that "the frequency of respirations is diminished by the drug, the more decidedly the greater their excess has been over, the normal condition," I have verified in my cases. In other words, those cases characterized by violent dyspnœa with marked cyanosis are more rapidly and certainly relieved than are those in which the symptoms are less urgent.

Up to the present time I have used the drug in seven cases, distributed as follows: one of abdominal dropsy, causing dyspnœa; two of chronic bronchitis, with pulmonary emphysema; and four of tubercular disease of the lungs; and in all of them it was beneficial to a degree beyond my expectations, in no case failing to materially increase the comfort of the patient. I select one case from each class for report.

CASE 1.—Mrs. L. W., aged 38, mother of five children, had been in bad health for several years, and in the fall of last year (1886) she began to suffer from ascites. During the past winter she would have frequent attacks of dyspnœa due to the dropsical accumulation in the abdominal cavity, which finally became so severe as to seriously alarm her friends. All the usual remedies had been tried, with little or no benefit, by the practitioner who had charge of the case, and at his suggestion I was called in consultation. In connection with treatment for the relief of her general condition, she was put upon the solid extract of quebracho in two-grain doses for the relief of the dyspnœa, given at the time an attack was threatened, and repeated as often as was indicated, with the result of affording almost complete relief from this most distressing symptom.

The sample I had obtained was soon exhausted, when I ordered a fresh supply, as the patient was enthusiastic in its praise, declaring that it was "worth its weight in gold." Its use was continued in this case until the cause which had produced the symptom for which it was given was removed by appropriate treatment, and she is now fully restored to health. Its action in this, the first case in which I had used the drug, was remarkable; the difficulty of breathing was at times so great as to be alarming, when two grains of the solid extract was sufficient to give almost immediate relief, without any bad effects whatever.

It had no action upon the pulse in this case, except to render it a trifle more full without affecting the rate.

CASE II.—A negro man, of more than the ordinary intelligence of his race, forty years of age, and by occupation a farmer, has been a sufferer from bronchial catarrh, with emphysema, for the past two or three years. He is able to walk about, but the least exertion gives rise to a difficulty of breathing which is very distressing. He had been under my care about eighteen months before I obtained the quebracho and no remedy that had been administered had been capable of preventing or cutting short the attacks of dyspnœa. Upon the occasion of his first visit to my office after I had obtained the drug, I gave him the entire sample of the fluid extract, about one ounce, with instructions to take a teaspoonful whenever he felt the difficult respiration, and also to take a dose just before undertaking any of the small tasks which had previously given rise to an attack. Several days subsequently he returned for a fresh supply, saying that it had acted like a charm," and that with it he was able to walk about his small farm and attend to its management without experiencing to any great degree the ill effects which had previously followed the slightest exertion. He seemed greatly disappointed upon hearing that he had exhausted the supply on hand, but this feeling was somewhat mitigated when he was informed that I would give him the same drug in a different form. I accordingly gave him a lot of gelatin capsules, each containing two grains of the solid extract, and instructed him to use them in the same way—*i. e.*, to take one capsule whenever an attack of dyspnœa was threatened, and also to take one just before engaging in work of any sort. He has now been taking it perhaps six months, and, while his general condition is not much changed for the better, by taking the quebracho as directed, he is enabled to prevent or cut short the attacks which had, previous to his beginning its use, made his life a burden to him.

CASE III.—Mrs. M. E., a widow lady, aged 63, of a tuberculous family, was treated twenty years ago by her family physician for phthisis, and with such success that she gradually regained her health to the extent that she was enabled to attend to her household duties. But the germs of the disease were not entirely

eradicated from her system, and for the past four or five years she has been a sufferer from that dread disease. It is unnecessary to give a minute description of her physical condition at the time she came under my care; suffice it to say that she presented all the symptoms of a fairly well-developed case of pulmonary tuberculosis. Upon awakening in the morning she would be seized with an attack of coughing, accompanied by great dyspnœa of an asthmatic character, which would last sometimes for several hours, and, passing off, would leave her in a greatly weakened and helpless condition. Under appropriate treatment the cough was considerably relieved, and she seemed better in every respect, with the exception of the dyspnœa, which continued to return at irregular intervals, and at times was so severe as to be alarming. At this juncture I determined to give the quebracho in combination with remedies for the relief of the cough, and accordingly wrote the following:

℞ Syr. prun. virg.,
Syr. tolutani,
Ext. quebrach. fld., ää ℥ i;
Acid. hydrocyanici dil., gtt xxiv;
Morphinæ sulph., gr. iss.
M.
Ft. sol.

Sig.—Take a dessertspoonful as often as necessary to afford relief.

After the first two doses, each containing two-thirds of a drachm of the quebracho, the difficulty of breathing was very considerably reduced, the respirations sinking from 46 to 24 per minute in three hours, and by continuing it according to direction she was enabled to enjoy a longer period of comparative ease than she had experienced for months.

As before mentioned, these asthmatic attacks showed a tendency to come on in the early morning shortly after awaking from sleep, and, with the object in view of preventing them if possible, I gave this prescription,—

℞ Ext. quebracho, gr. xviii;
Morphinæ sulph., gr. iss.
M.
Ft. pil. No. xii.

—W. P. Ellis, M. D. in *Gaillard's Med. Jnl.*

Piscidia Erythrina.—Piscidia erythrina belongs to the natural order leguminosæ; it is a small tree growing naturally in the West Indies, also said to grow in Southern Florida. The properties possessed by the bark of the root are astringent, diaphoretic, hypnotic and narcotic—and I think we may safely say somewhat tonic. Its toxic properties have been known in its own natural habitat for many years, where it is used for catching fish. We are told "that the leaves, twigs and root-bark are collected, macerated with the residue from the distillation of rum or with lime water, then transfer into baskets, and the baskets are dragg up and down the water until the active principle has been extracted and the fish are stupefied."—United States Dispensatory. It is from this use of the bark that it gets its name piscidia.

The remedy is a very valuable one. I have been using it since soon after its first introduction by P., D. & Co., and in my estimation the remedy is growing in value. By the profession at large it is not generally used, and I write this more to call attention to the drug as being a very valuable addition to that class of remedies that are given to produce sleep and relieve pain.

What physician who has noted the irritation of stomach, the arrest of secretion, the loss of appetite, the dull headache, that follows the use of opium or its salts, but has wished for a remedy that would do the work without leaving these sad consequences in its train.

Gentlemen of the profession, we have in piscidia erythrina an article that will in a large percentage of cases do that very thing.

My own opinion is that though it is a good anodyne relieving pain in a marked manner, yet where the pain is intense, we shall do well to use a remedy stronger than this article. I would pronounce it a better hypnotic than an anodyne. As illustrating the action of this remedy it is recorded in the United States Dispensatory that Dr. William Hamilton, one of the first investigators with this remedy, experimented with it as early as 1844. He was laboring with a severe attack of toothache, and on retiring he took one drachm. He first felt a violent sensation of heat internally, which gradually extended to the surface and was followed by profuse perspiration, with profound sleep for twelve hours. On awaking he was quite free from pain and free from the unpleasantness which attends the use of opiates. One would think that this single result would have been sufficient to have stimulated investigators; on the contrary, it was allowed to rest in oblivion for many years, till the enterprise of Parke, Davis & Co. brought it into notice. The United States Dispensatory says that while various practitioners have used it with good results to produce sleep and relieve pain, others have failed to get good results, and Dr. H. C. Wood, in one case of neuralgia found it to produce great nausea and gastric distress without evincing the slightest narcotic effect. Now I can easily see that you might give a dose of water in a case of neuralgia where the stomach was very foul and you would provoke emesis. Of course the remedy being vomited from the stomach, we should hardly look for any narcotic effect. Another probable failure to get good results, would be an inferior article. I have never used anything but the fluid extract as prepared either by Parke, Davis & Co. or Lloyd Bros., and I have not failed to get good results. Now, for its field of usefulness this would be neuralgia, rheumatism, nervous insomnia, dysmenorrhœa, etc.

Dr. J. P. Webb reports good results from its use in dysmenorrhea, and any physician who will first read the results of Dr. Hamilton's ℥ i dose, then follow up the thought, will see that in cases of congestive dysmenorrhea it cannot but be a very good remedy; in this case I would use it in hot sweetened water.

In a case of severe neuralgia of the face and head in which the pain was terrific, I prescribed:—

℞ Tr. gelsem., ℥ ss.
Fl. ext. erythrina piscidia, ℥ iij.
Syr. rhei et pot. to ℥ iv.

M. Sig.—℥ i every hour till relief came.

The result was most pleasing, this ℞ with a little quinine to overcome periodicity completed the cure; the case had been running some time.

One week ago I was called to prescribe for a case of neuralgia of the right kidney; the pain came on spasmodically, and was so severe that it drew the man double; it very much simulated the passage of a renal calculus. The kidneys had been doing their work rather scantily. I prescribed:—

℞ Fl. ext. erythrina piscidia,
Fl. ext. barosma, ää ʒ iv.
Syr. rhei et pot, ʒ iij.

M. Sig.—ʒ i and repeat as per instructions. In this case I ordered hot packs to the painful part. The man, living alone, had no convenience for packs, so he depended on the medicine. Result satisfactory. I could multiply cases but there is no need. Suffice it to say that to allay pain or produce sleep it can be used in doses of from ten drops to one and a half drachms. In cases of insomnia, especially of long standing, I prefer to give it in twenty or thirty-drop doses and repeat every two or three hours till the result is produced, rather than depend on large single doses.

℞ Fl. ext. erythrina piscidia,
Glycerin, ää ʒ i.

M. Sig.—ʒ i every four hours. This of course in long-standing or persistent insomnia. We have seen no bad results.

It has been used in carious aching teeth, applying in the cavity on a dossil of lint. While I would not object to this I should most certainly give it internally at same time.

It has been asserted that this article makes a very good injection in cases of gonorrhœa, as follows:—

℞ Fl. ext. erythrina piscidia, ʒ ij.
Aqua destil. to ℥ iv.

M. Sig.—Use as injection. I have never prescribed it in this way, but I have it on good authority that it does well in such cases, and am quite prepared to admit the truth of these reports. I could say much more, but I have said enough to call attention to this, one of the not ancient remedies, one that in my opinion has come to stay.—Jno. Fearn, M. D., in *Cal. Med. Jour.*

Recent German Literature of Chronic Gastric Diseases.—The recent literature of this still unsettled department of medicine has been lately ably reviewed by Dr. Boas in the Berliner Klin. Wochenschrift, Nos. 6 and 7, and the views of the partisans in the question are fairly rendered. It appears that the Congress für innere Medicin afforded opportunity for reopening the much disputed question of the absence of free hydrochloric acid from the stomach when there is cancer of that organ. This absence has been asserted by so many clinical observers for many years now that it has become a point of great importance Cahn, at the above-named congress, remarked on the unreliability of our present rough tests for HCl compared with the titration method, which never failed to give indications of the presence of HCl. The failure of color tests to reveal HCl depends, in his opinion, upon the accumulation of the products of digestion and the loss of "eliminative activity." This failure, however, is not constant, for Cahn himself has reported a case of hyper-secretion of acid in pyloric cancer. Riegel, von Noorden, and Sticher hold out for the value of the determination of the presence or absence of HCl in the diagnosis of cancer. Moreover, von Noorden and Honigmann (Zeitschr. f. Klin. Med., Bd. xiii, H. 1) find that the HCl residue, always found to be present even in cancer when the titration method is employed, is due to a free HCl, but two combinations of the latter with albumen. They, therefore, uphold the value of the color tests. But another difficulty arises, inasmuch as many observers have proved that HCl may be constantly absent in chronic gastric catarrh also, as well as in atrophy of the gastric mucous membrane. Jaworski and Gluzinsky have have reported such cases, also Boas Deutsche Med. Wochenschr., 1887, Nos. 24-26), and Grundzach (Berliner Klin. Wochenschr., 1887, No. 30). The latter observer found that HCl was constantly absent from the stomach in five out of more than a hundred non-cancerous persons. Wolff and Ewald (*Ibid*, No. 30) strike a still stronger blow against the theory that the absence of HCl from the stomach is pathognomonic of cancer. In eight persons—some quite healthy, others with only slight gastric disturbance—they found the free HCl was constantly absent, and even the administration of this acid made no difference.

Turning now to the color tests of HCl, of which there are a great many, Congo-red is declared by Riegel to be a perfectly satisfactory preliminary test; Günzburg advocates phloroglucinvanillin; and Boas prefers tropæolin paper. But here, again, there is a great disagreement, for Günzburg maintains (Centralb. f. Klin. Med., 1887, No. 40) that the usual color tests, namely, gentian violet, tropæolin, and Congo-red, are affected by the organic acids also in various degrees of concentration, and Boas specifically states that a 0.03 per cent. lactic acid solution will cause a weak but distinct blue in Congo-red paper. Arlt (*Ibid.*, 1888, No 3) and Kuhn (Inaug. Diss. Marburg, 1887) argue that this is only true of a watery solution, but Boas replies that the objection is superfluous, as he only referred to free lactic acid. Boas has had a tropæolin paper prepared which discriminates between HCl and lactic acid, and is declared to be highly satisfactory as to cheapness, simplicity, and distinctness of result. A percentage of HCl even below 0.05 is easily recognised thus, and the presence of even 5 per cent. of organic acids makes no difference. Moreover, the degree of coloration with HCl affords an indication of the quantity of the latter present. Günzburg's test is also extremely sensitive and reliable, but less simple. Two parts of phloroglucin and one of vanillin added to 30 of absolute alcohol give a yellowish-red solution. One drop of this in contact with a trace of a mineral acid gives a fine red coloration, red crystals being precipitated. Organic acids, even when concentrated, do not affect this test. In using it, a few drops of a filtrate of the gastric contents (usually obtained by a sound) are mixed with as many of the test solutions, and the mixture is carefully evaporated over a small flame, a bright red color appears at the margin of the liquid. The test indicates

up to 1-20 per mille of HCl. Or a drop or two of the test solution may be added to a few drops of the unfiltered stomach-contents on a strip of paper. On well warming over a flame the red spot indicating HCl appears; it is not affected by ether. As before said, the absence of HCl in gastric cancer is attested by so many different observers as to make this sign of importance diagnostically, notwithstanding that a few cases to the contrary are cited, besides many negative cases, that is, cases in which HCl was found to be absent but in which no cancer was present.

Next in interest to absence of HCl comes hyper-acidity of the stomach. This condition is associated with hyper-secretion of the gastric juice, according to Boas, who argues that (1) chronic hyper-secretion without hyper-acidity has never been observed; (2) the subjective symptoms are not the result of excess of the gastric juice, but of its abnormal acidity; if this is removed they at once cease; (3) in general the two conditions go together, increasing and diminishing *pari passu*. The amount of acid juice in a fasting stomach must be about 100 cubic centimetres to constitute hyper-acidity, according to this observer, who lays great stress on the quantity. Riegel and his disciples, on the other hand, maintain that the two conditions are to be entirely separated from each other; Honigmann, in particular (Münch. Med. Wochenschr., 1887, No. 48), states that there is no connection between them; but both Riegel and Reichmann (Berlin. Klin. Wochenschr., 1887, Nos. 12-16) allow that there are transitions.

Taking hyper-secretion apart from hyper-acidity, Reichmann, who has carefully studied this subject, distinguishes continuous from periodical hypersecretion. The latter is a symptom of derangement of ether the central nervous system (tabes), or the whole nervous system (neurasthenic dyspepsia, hysteria), or else is due to local disturbance of the secretory nerves of the stomach. The *crises gastriques* of Charcot, the periodical vomiting of Leyden, and the gastroxynsis of Rossbach come under this category. The typical hemicrania and periodicity point to a central cause, and not to mere irritation of the stomach from accumulation of juice in the fasting condition, as Reichmann would have it. In such cases the acidity is lower than the normal. As to continuous hyper-secretion, this is a condition quite unexplained as yet, for it is no explanation to say that there is "increased irritability," as "lessened absorption" is not a constant accompaniment of this state.

We come now to the etiology of hyper-acidity of the gastric juice, a condition occupying the foreground in recent investigations. Riegel has constantly found an excess of acid when chronic ulcer of the stomach is present, and maintains that the latter is due to hyper-acidity *per se*. The frequency of this coincidence, though it is not absolutely constant, is asserted by so many other observers—Ewald, Korczynski and Jaworski, van der Welden, Rothchild, and others—that it may be regarded as established. Again, Decker, working in Leube's clinic, has made experiments on dogs by injecting small quantities of hot fluids into the stomach (Berlin. Clin. Woch., 1887, No. 21); in one case an extravasation was produced between the mucous and muscular coats, the mucosa being intact; in another case two typical round ulcers were caused, close to the pylorus. Decker thinks that the continual ingestion of hot substances (including liquids) is the most frequent cause of ulcer, and cites a case in support of this. Ritter has experimented on animals in another way, namely, by direct injury to the gastric mucous membrane (Zeitschr für Klin. Med., Bd. xv, H. 5, 6), but lesions so caused heal too rapidly, as Cohnheim has shown, to allow of any inference from them to chronic ulcer in man. Ritter and Hirsch have recently asserted that hyper-acidity is by no means so common in gastric ulcer as has been supposed (Ibid. Bd. xiii, H. 5), for they found this condition only twice in five cases of ulcer; and Boas has seen two cases with all the symptoms of ulcer, but with normal acidity; these cases, however, he declares are exceptional. The test meals selected by Ritter and Hirsch, namely, egg and milk, are said to be unsuitable for ascertaining the acidity of the gastric juice, as being highly albuminous; starch is the proper food for this purpose, as the results of Ewald, Sticker, and Boas prove.

As to the final results of excessive acidity, Jaworski (München. Med. Wochenschr, 1887, No. 7) has followed up several cases of round ulcer, and found that after several months the formation of acid ceased altogether. Boas observed the same results in dilatation of the stomach, but observes that such cases are exceptional, and that the aim of treatment must be, not the prevention of the gastric secretion, but its regulation.

As to atrophy of the gastric mucous membrane, Ewald, Lewy, and Boas have published cases. The latter mentions sharp radiating pains in the epigastrium as important in the diagnosis, also absence of coagulating ferment (besides absence of hydrochloric acid and pepsin). See Berliner, Klin. Woch., 1887, No. 4; Münchener Med. Wochenschr., Nos. 42, 43.

Ewald and Sievers have used salol in the diagnosis of dilatation, as this substance passes unaltered through the stomach (Therap. Monatsh., 1887, August). The presence of salicylic acid in the urine was ascertained in about twenty or thirty minutes after giving salol, and at the latest after an hour, so that its absence for a longer period than this would indicate dilatation of the stomach (from pyloric stenosis). The appearance of salicylic acid in the urine was hastened by faradization of the gastric region. But Sahli throws a doubt upon the certainty of the salol test by his assertion that fission-fungi can decompose salol—in other words, that fermentative changes in the stomach may cause the destruction of salol within that organ. But such cases always require a considerable time.—*Brit. Med. Jour.*, April, 1888.

TREATMENT OF CHRONIC INFECTIOUS DISEASES.—In a recent "Conference" before the Faculty of Medicine, Paris, Prof. Bouchard discusses the method of treating chronic infectious diseases, in the light of modern notions of etiology. He defines disease as "the sum of functional operations and secondarily of anatomical lesions which are produced in the economy under the influence of morbific causes, and the reaction of the organism against the latter." This definition, he says, assigns to the

reaction its legitimate place, while avoiding the exaggeration of the Schools, according to which the disease consists altogether in the curative effort. Sometimes this reaction is reflex, nervous, as where the combined energies of the principal systems of functions are called forth to protect the organism as a whole, and to assist the suffering part; sometimes it is local and elemental, limited to the organic particles of the tissue which is suffering the attacks of the morbific agent, and which react, on their own account, without the aid of the nervous system. Such a reaction as the latter implies, can be witnessed in any tissue, as the cornea, whose nerves are divided, and in which an eschar is made with a caustic; a process of elimination and cicatrization takes place, and wholly without nerve-influence.

Besides those cases where the reaction is sufficient, and those where it is insufficient to bring about health, that is, those that terminate in recovery, and those that terminate in death, there is a third class of cases which seem to go on neither to one nor to the other of these results, and constitute chronic disease.

What is a chronic disease? A disease, says Professor Bouchard, becomes chronic, not because there is not a recent reactional effort, but because of the permanence of the perturbing agency. Despite the incessant struggles of the economy to return to the normal state, it ever exhausts itself in futile and ineffectual efforts against a persistent cause. This permanent cause may be the pathological sequel of an acute disease, for example, a valvular lesion of the heart, or stenosis of the pylorus. Another example is seen in diabetes, although it is generally classed as a diathetic disease, that is, a disease caused by a permanent vitiation of nutrition; the cells of the economy do not consume sufficiently the sugar in a given time. The glucose, which continues to be fabricated in normal quantity, accumulates in the economy, whence result hyperglycæmia and glycosuria. Here the reaction of the organism is apparent enough; it tries to get rid of the excess of saccharine matters, and does eliminate them by the urine, and without this elimination the patient would soon die of blood-poisoning; this curative effort is, however, insufficient, and the disease, being due to a permanent dynamic trouble, persists and becomes chronic.

Among other causes of chronic diseases, Bouchard refers to the influence of certain microbes which get possession of certain parts of the organism, and make their permanent habitat there. They are enabled to do this "because we renew incessantly the nutritive matter which they live upon, or because we destroy or eliminate certain matters which they secrete, and whose accumulation would soon compromise their activity and development." Bouchard regards the bacterial discoveries of our times as destined to revolutionize medicine as they have already revolutionized surgery. In fact, the triumphs of surgical antisepsis have made our epoch memorable in the annals of the healing art, and although the progress thereby achieved has been chiefly in the direction of prophylaxis, yet it may be affirmed that the antiseptic treatment of infections, as now incorporated in the practice of the day, has been a fruitful gain over past therapeutic methods. Favus has yielded to vigorous antiparasitic treatment, and lupus, a disease which formerly stuck fast to the individual all through his life, till he finally succumbed to general tuberculosis, has shown itself to be amenable to a suitable local medication, that is scarifications and curetting. The same may be said of chronic abscesses, and especially the so-called "cold" abscesses, and ossifluent abscesses; free incisions, with thorough drainage and copious disinfectant washings, followed, if necessary, by curetting and topical applications of iodoform, often bring about a rapid cure, whereas, formerly, there was nothing for the patient to look forward to but interminable suppurations and general tubercular infection. The abdomen has been opened antiseptically for peritoneal tuberculosis, the disease glands removed, and the patient has got well, and what has been done for the peritoneum has been done for the pleura and other serous cavities. The antiseptic treatment of empyema and chronic swellings of the joints has given especially brilliant results.

How is it with respect to cancer? This disease is already treated by surgeons as if it were an infectious disease, and we have seen the late Congress of Surgeons recommend, in order to prevent relapses, that thorough ablation should be performed before the end of the second month of the development of the disease and with the affected gland or organ all the glands in the vicinity should be removed, even if they appear to be healthy.

Such has been the influence of microbiotic doctrines on surgical therapeutics, and we can but hope that internal pathology will ere long profit by improved knowledge of the human organism and its reactions, and of the causes of chronic maladies, whether these be animate or inanimate.—*Boston Medical and Surgical Journal.*

THE THERAPEUTIC STUDY OF FAMILIAR PLANTS.—Many physicians are rather inclined to sneer at so called "yarb teas," and carry their antipathy to the point of despising all household remedies and old women's prescriptions. We cannot help feeling that this is much to be regretted, for it stands in the way of our progress in therapeutics. Some of our grandmother's mixtures were undoubtedly good, despite all this sarcasm and scepticism. The fact is, that about familiar plants and their uses they knew in their homely way a great deal more than we do. We are rather prone to doubt the virtues of these homely herbs growing in every country garden. A vegetable remedy may be heralded ever so loudly, yet we are rather suspicious of it unless it be something which comes from a distant land and is wholly a novelty to us. In a word, our faith in a remedy grows in proportion as that remedy is scarce and inaccessible. Certainly it is a fact that some of our most valuable remedies are of this description—coming a great distance and obtained only with great difficulty and expense. But we are inclined to suspect that, if we only knew where to look, we might find perfect substitutes at home. There must be countless wonderful principles hidden in familiar plants which we have never thought it worth our while to consider therapeutically.

But the time is coming when such sweeping statements cannot be verified. We are glad to

see the rapid growth of original research in therapeutics, and expect therefrom very positive results. It is a great pleasure to see the increased frequency with which special studies of plants and their medicinal virtues appear in our medical journals. Occasionally, even, we find an original investigator who makes a strong plea for some plant that is snubbed by the "Pharmacopœia." This is development in the right line. The daily discoveries of new drugs and modifications of drugs prove that we are still far from knowing all there is to be known about materia medica. The degree of our success in the future depends on such humble and homely things as studying the application and use of common herbs, in many of which lie hidden therapeutic treasures waiting to be mined.—*Med. Register.*

Sponge Dressing for Mammary Abscesses.—In a letter to the editor of Practice, Dr. Paul F. Munde says: I wish to add my testimony, from an experience of over fifteen years, to the statement of Dr. W. J. Harris in your February issue in regard to the use of sponge-dressing for abscesses, so far as it applies to mammary abscesses. I know of no means so safe, sure and rapid as equable compression by a large bathing sponge to ensure speedy cessation of suppuration and a complete closure of the abscess cavity in the female breast. After evacuating the pus through a fairly large incision, I apply a large coarse bathing sponge cut out in the centre to receive the gland, and steeped in hot 2 per cent. carbolized water, and rapidly squeezed dry, over the whole breast, cover it with oiled silk, and press it firmly against the thorax by two large folded three-cornered bandages, the first lifting the breast up and being tied behind the neck, the second going directly around the thorax. The abscess-cavity is thus kept continually emptied, and its walls being in apposition by compression, incline to adhere and thus secure a speedy closure of the abscess.

According to the amount of suppuration, the sponge is washed and reapplied three or four times in 24 hours for the first day or two—later on, less frequently. The largest mammary abscesses I have seen, involving the whole gland, have been completely closed under this treatment in less than one week. It is particularly applicable to cases where some of the gland tissue is still hard and brawny, and where the drainage-tube only seems to irritate the wound.

This dressing is convenient, inexpensive, easy of application, and perfectly efficient, in every way far preferable to drainage and strapping.

I have not found it necessary to syringe out the abscess cavity with bichloride solution, although if the pus were offensive I should certainly do so.

I do not remember where I first heard of this method of treating mammary abscesses, but it certainly was not from the books. Since I have been using it, I believe I have seen it mentioned in surgical literature; where, I do not recollect.

Indications and Contraindications of Antipyrine.—At the meeting of the Therapeutic Society of Paris, February 22, 1888, M. Huchard referred to the investigations of Robin and Casimir, which indicate that antipyrine diminishes the quantity of urine, and expressed the opinion that on this account the drug was contraindicated in certain affections of the kidneys. If it is of use in pure nervous angina pectoris, it is inactive in true angina with stenosis of the coronary arteries. If the heart's action is intermittent, its use may result in weakness of the heart and collapse. In two cases of broncho-pneumonia, Huchard observed grave collapse following moderate doses of antipyrine.

On the other hand, he recommends it in polyuria, on account of its capacity to diminish the quantity of urine. He has under his care a woman thirty-eight years old, who had suffered since her eighteenth year with a meningo-myelitis which followed typhus fever. For several months she drank a great deal and passed as much as 48–56 pints (24–28 litres), of urine a day. The reflexes were heightened, there were violent pains in the limbs and along the spinal column. In order to act upon the nervous system and upon the polyuria, Huchard gave two drachms of antipyrine daily. The quantity of urine diminished in ten days to 10 pints (5 litres) in twenty-four hours. The antipyrine was then stopped, and at once the quantity of urine increased, although not to the same height as before. Up to the present time Huchard has treated only one case of polyuria in this way, but he refers to the fact that Dr. Göllner had obtained improvement in a few days in a diabetic patient through the use of large doses of antipyrine. Huchard holds that antipyrine is proper only in nervous polyuria, while in the polyuria accompanying nephritis, he obtained no result.—*Deutsche Medizinal-Zeitung*, March 26, 1888.

The Treatment of Tonsillitis by Salicylate of Sodium.—I think the desirability of having some really reliable remedy for this common and painful affection must be felt by all interested in the healing art; especially when we consider how useless, in the majority of cases, are the so-called specifics for this disease, whose name is legion. This consideration, together with the idea that tonsillitis bears some not distant relationship to acute rheumatism, led me to try the salicylate in every case that has come under my care for the last two years. As far as I have had the opportunity of examining the action of the drug in those cases, it has come up to my best expectations, the fever which is not inconsiderable in many cases (103° F.) is speedily reduced, the action of the skin promoted, the resolution of the inflammation in the throat hastened, and the formation of tonsillar abscess averted. My plan of treatment is as follows: Open the bowels freely with a good dose of mistura sennæ co., put the patient on milk diet, and administer the following draught:

℞ Sodii salicylatis, grs. x–xv.
Tincturæ aurantii corticis, ♏ x.
Aquam ad ℥ i.
M. fiat haustus, quartis horis sumendus.

When the inflammation in the throat begins to subside, reduce the dose of salicylate and continue to give in smaller doses for a few days

after all throat symptoms have disappeared. The fact of my not having heard or read of the use of salicylate of sodium in these cases, and the hope that some of my professional brethren will give it a more extended trial, induce me to make this communication.—A. HILLABY, M. R. C. S., in *Practitioner*, April, 1888.

THE TECHNIQUE OF INTESTINAL INJECTIONS.—QUINCKE is quoted by the Deutsche medicinische Wochenschrift of April 5, 1888, in his description of methods of intestinal injections which he has recently found useful. In place of the hard tip which is ordinarly used on enema syringes he substitutes a soft flexible nozzle about eight to eleven inches long, and of convenient calibre. The tip is slightly harder than the rest, and has two lateral openings: the external end is dilated somewhat, the whole resembling an œsophageal tube. It must be perfectly smooth, and of the best rubber. The insertion of such a tube is far less painful than the use of the ordinary tip. It may be ordinarily inserted two or three inches, but when necessary may be passed four or six inches without injury. This tube may be very easily cleansed, soap and water and carbolic acid sufficing to disinfect it thoroughly. An injection of oil may be readily given by filling the dilated external extremity with oil, and then attaching the irrigator tube; the water from the irrigator will force the oil before it into the bowel. In obstinate tympanites the tube may be allowed to lie in the bowel for an hour or more, securing the free exit of gas. QUINIKE secures the retention of a considerable quantity of water high in the bowel by a very ingenious device which consists in attaching to a convenient portion of the tube a collapsed rubber balloon two inches in diameter when inflated. This balloon may be filled with water by its own small separate tube. When introduced to the desired height, the nozzle aperature is free above it. The balloon is then filled with water, occluding the bowel; the desired injection is then introduced beyond it, and as much fluid as desired is thrown in at the desired level.—*Med. News.*

TREATMENT OF DIPHTHERIA WITH PERCHLORIDE OF IRON AND MILK.—Dr. Mohammed ben Nekkach (Inkermann), has treated 21 diphtheritic patients with perchloride of iron and milk, and has obtained 20 cures, and lost a child of six months. Among the 20 cured are two adults. All these diphtheritic patients have been treated from the beginning of the disease before the period of asphyxia or intoxication. Outside of these 21 patients, six others have died; two have refused to follow the treatment; one has been treated by another method in a neighboring town; a fourth one did not follow the treatment accurately; and, finally, the two last were cases in which he was called too late by the parents. "To all these patients, most of whom were severely taken," he says, "I gave 25 to 30 gtts. of perchloride of iron in a tumbler of water (this solution being renewed every time it was used up); one quart of milk a day was given. A tablespoonful of each of these preparations was administered every five minutes. In addition to this medication, I have prescribed emetics and painted the throat three times a day with a strong solution of perchloride of iron, which, while taking away the false membrane, at the same time cauterizes the subjacent surface."

He states that when perchloride is administered from the beginning of the disease the false membrane does not extend, but the disease becomes cocalized.

Dr. Gibert (Paris) remains skeptical as regards the local action of perchloride of iron; he uses it as a tonic, but employs other agents in addition.—*Med. and Surg. Reporter.*

A NEW AND RELIABLE REMEDY FOR COCCYGODYNIA AND PRURITUS ANI.—I have, for reasons I do not now care to speak of, regarded this disease as purely neurotic. I have treated it with the Faradic current. One treatment produces immediate relief; a few treatments cure it. Three cells are sufficient; time, five minutes; the frequency of application depends upon the return of pain. The anode is placed over the sacrum and the cathode in the vagina or rectum, or over the sphincter ani muscle. This treatment, so far as I know, is original with myself.

Much has been written of late concerning the treatment of pruritus ani. I desire to add my owh suggestion. The best remedy I have ever found is the galvanic current; the quantity required need not exceed five milliampères; the time of application five minutes. The relief is immediate, and the application once or twice daily is quickly curative. The anode is placed over the perineum or base of the scrotum and the cathode against the sphincter ani, or, if required, within its grasp, bringing all the pruritic surfaces between the poles. I claim to be the first, so far as I know, to suggest this remedy for the treatment of this disease. I will ere long have more to say of it.—R. Stansbury Sutton, M. D., in the *Med. and Surg. Rep.*

THE CONTRA-INDICATIONNS AND DANGERS OF ANTIPYRINE.—Antipyrine should not be administered in anti-hyperpyretic doses to patients suffering from renal disease, it having been demonstrated that its effect is to suspend the functional activity of the kidneys. For anodyne purposes, antipyrine should be avoided in cases of real angina, because, although it may allay the pain, it acts injuriously on the muscular structure of the heart. In pseudo-angina there is no reason to prefer it to morphine. The danger to anginal patients from the administration of antipyrine consists in that (1) there is a constant risk of acute dilatation of the heart, which may result in depletion of the vessels supplying the nervous system and so cause death from collapse. (2) All anginal patients have more or less diseased arteries, and the kidney function is consequently impaired. DR. ELVY considers antipyrine a drug which has obtained notoriety by false pretences. In one case it modifies the temperature without diminishing the fever; in another it alleviates the pain, but increases the risk in such wise that "if patients feels better while they live, they nevertheless incur serious risks."—ELVY, in *London Med. Record.*

THE USE OF THE BINIODIDE OF MERCURY IN SURGERY.—The use of the biniodide of mercury has lately become more popular amongst surgeons, not only in this country, but elsewhere, and M. ROYCE in a recent communication has drawn further attention to its advantages. He claims that it does not irritate wounds; that it is a much more powerful antiseptic than carbolic acid; that it has no smell, and that an alcoholic solution of the drug, one in three hundred, is readily miscible with hot water. In referring to this drug and the manner in which it can be used as an antiseptic in surgery, he contrasts the expense which is unavoidably involved by the employment of Lister's dressings. It is undeniably true, that since the introduction of antiseptic surgery, which has developed into the use of many forms of expensive dressings, a large source of expenditure has resulted on this account, to hospitals generally, and, it may legitimately be asked whether there is not some room for economy in this respect, in view of the fact that the principles of antisepticism are not so well understood.—*Med. Press and Circ.*

THE TREATMENT OF TYPHLITIS.—M. BOUCHARD indicates the following as an excellent treatment in cases of typhlitis: Soothe the pain by a subcutaneous injection of morphia, if very sharp; if not, apply a thick layer of Neapolitan ointment with belladonna, covered by a large and very hot poultice. Administer aseptic rectal injections twice a day, with at least one litre of water, to which should be added 5 grammes of borate of soda, and two or three teaspoonfuls of tincture of benzoin and camphorated alcohol mixed. Injections must be given very slowly. Absolute rest is indispensable. No purgatives—or, if any, only those of the mildest kind, such as magnesia in water, etc. The lightest kind of diet, such as will leave no deposit for intestinal fermentation. Milk and alkaline water taken in small quantities; later on, milk thickened with yelks of eggs. This treatment will generally restore intestinal asepsia. If at the end of a fortnight there is thickening round the cæcum, a small blister should be applied.—*London Medical Record.*

PELLETIERINE IN TÆNIA.—M. E. LABBE recommends the following as an excellent tæniafuge: For adults, 40 or 50 centigrammes of sulphate of pelletierine are dissolved in ordinary syrup; for children eight years of age and upwards, this quantity is reduced to 25 or 30 centigrammes. This remedy should not be administered to children below the age of eight. It is well to add 50 centigrammes of powdered tannin to the mixture above described. The evening before taking this remedy, the patient should take only a little milk. An enema should be given at bed-time, and early next morning the mixture is administered. The patient should remain in the horizontal position, in order to avoid vertigo. A quarter of an hour after taking the mixture, he should take 30 grammes of brandy or an infusion containing 10 to 15 grains of senna. Castor oil (30 grammes) and sulphate of soda have proved equally efficacious. The tapeworm is usually expelled in three or four hours.

USEFUL FORMULÆ IN CHILLS AND FEVER.—DR. A. WEBB, Collierville, Tenn., reports the following formulæ to be almost specific in their curative effect in the chills and fever of the malarial district in which he practices:

℞ Sol. nitrate iron, ʒ iij.
Quinine sulph., ʒ i.
Strychnine, gr. i.
Fowler's solution arsenic, ʒ ii.
Aquam, q. s. ad ℥ viij.

The solution of nitrate iron he prepares as follows:

℞ Sulphate iron C. P., ℥ i.
Nitric acid, ʒ i.
Solv. et ad. q. s. ad ℥ iv.

A NEW REMEDY FOR NIGHT-SWEATS.—DR. SAMPSON POPE, in a communication to the Therapeutic Gazette calls the attention of the profession to an indigenous drug for the relief of night-sweats. He says: "The remedy is one indigenous to the whole country; it is therefore within the reach of us all; it is the cinquefoil, *potentilla canadensis*, called by some botanists *potentilla sarmentosa*. I have stopped night-sweats with it when atropine failed to relieve. It is pleasant to take; when drawn it has an agreeable odor much like table tea. The manner of preparation is to pour boiling water on a handful of the vine, leaves and root. Let the patient drink *ad libitum*."

RESORCIN IN CANCER.—Resorcin has been used with excellent results in the treatment of cancerous growths on the face, in the form of an ointment containing the equal quantities of resorcin and vaseline. This mixture is applied first; an ointment containing 20 grammes of resorcin and 30 grammes of vaseline is then applied. The ointment forms eschars on the surface of the growth. These eschars fall off when pure or iodoform vaseline is applied; fleshy granulations subsequently appear, and healthy cicatrization rapidly follows.

MASSAGE IN NEURALGIA OF THE HEAD.—EULENBURG emphasizes the great value of massage in the various neuralgic affections of the head. The affected parts are both to be beaten rapidly (tapotement) and to be gently stroked (effleurage). Besides, even if the seat of the affection be in the forehead, the occipital region is to be likewise treated. Etiological factors, such as obesity or heart disease, are to receive due attention. Internally antipyrine, in 15-grain doses, is the most efficient remedy. Galvanization is often useful.

A SALVE FOR CHILBLAIN.—Dr. Lassar recommends the following salve as very efficacious in chilblain:

Acid. phenic., gr. xvss.
Ung. plumbi.,
Lanolini., ää ʒ v.
Ol. amygdal, ʒ iiss.
Ol. lavand., gtt. xx.

—*Jour. de Méd. de Paris.*

The Medical Age.

Vol. VI. DETROIT, JUNE 11, 1888. No. 11.

Original Articles.

THE APPLICATION OF ELECTROLYSIS.

BY CHARLES H. MERZ, A.M., M.D., SANDUSKY, O.

In the therapeutic applications of electrolysis, the selection of a suitable battery is an important matter. Of the one fluid cells, with a solid depolarizer, the LECLANCHE is probably the best. The carbon element is packed in a porous cup with the black oxide of manganese surrounding it. This cup is placed in a vessel containing a zinc rod and a solution of sal ammoniac. When the battery is in motion, ammonia is set free and absorbed by the water, chloride of zinc is formed and hydrogen is set free, but its polarization is prevented by combination with the peroxide of manganese. This battery is not adapted for continuous work, such as telegraph circuits and electro-plating, as it soon becomes polarized, but it possesses the valuable property of quickly regaining its strength when at rest. By many physicians it is considered the most suitable form of battery for medical purposes. Recently a new form of the cup has been introduced, occupying a space only a few inches square—making all that could be desired in the way of a small, compact cell.

A battery of thirty Leclanche cells will be found of sufficient strength for ordinary use. The necks of the jars should be greased on the inside to prevent "creeping" of the salts. All that is necessary to keep the battery in order is the occasional addition of water.

The electro-motive force of a battery is that force in virtue of which, continuous electrical effects are produced throughout a circuit consisting of two metals in contact, in a fluid which acts unequally upon them. The following figures show the electro-motive force of the batteries most commonly used as compared with an ordinary Daniells' cell:

Daniells, 1.079 volt.
Gravity, 1.068 volt.
Grove, 1.96 volt.
Bunsen, 1.9 volt.
Agglomerate Leclanche, 1.48 volt.
Snell, .47 volt.
Walker's, .66 volt.

In constructing a battery, the work which it is intended to accomplish must be kept in view. Calling to mind OHMS' law by which the intensity of a current which will result from any combination may be computed, we have:

$$\text{Intensity of current} = \frac{\text{Electro-motive force.}}{\text{Resistance.}}$$

or

$$\text{Cor I} = \frac{E}{I_R + E_R}$$

In other words, the intensity is inversely proportional to the resistance; the less the conducting power of the conductor, the greater the resistance and the less the intensity. The internal resistance is due to the liquid and to the conducting element, and the external resistance to the conducting wire. The internal resistance is greater, therefore, with the distance between the elements and the length of wire connecting them. The electro-motive force means the difference in potential of the cell elements, and is therefore unchanged by their size—the latter factor will alter the quantity of electricity, but not the intensity. For electrolysis the arrangement should be such as to secure intensity and, therefore, a number of medium-sized cells coupled in "series" or in "compound circuit," which is the same, should be used. I have for some time past used thirty Leclanche cells coupled in this manner.

From what has been said, it will be seen that the most useful medical battery is one in which the internal and external resistance are as nearly equal as possible. The resistance in the human subject varies constantly with atmospheric conditions—pressure on the electrodes and the parts of the body treated, hence the necessity of always measuring the current employed. The instrument most commonly used for this purpose is the galvanometer, graduated into milliamperes, and called a milliampere meter, and the voltameter. In the absence of scientific test instruments, the strength of current can be determined by thrusting the needles into some white of egg. A current of about 45 milliamperes is sufficient to coagulate the albumen in from 20 to 30 minutes.

Aside from the matter of accuracy, the milliampere meter furnishes a reliable means of recording the strength of current employed. It is as necessary in the proper administration of electric currents as is the steam gauge to the engineer. It is true that with the same number of cells and the same electrodes the current may be increased or diminished two or three times, according to the position of the electrodes, but this would only show the necessity

for accurately observing all the circumstances during the application and making them as nearly uniform as possible.

In applying electrolysis, the indifferent electrode, well moistened, should be firmly pressed in the patient's hand, or on the abdomen or thigh, according to the region operated upon.

In electrolysis, the positive pole coagulates blood, attracts acid and oxygen; the negative electrode dissolves blood, attracts alkalies, bases and hydrogen, and causes absorption.

Feeble currents, by their dilating action upon the capillaries, aid in producing absorption. Strong currents decompose the salts and coagulate the albuminoid elements.

The material which supports life in the human economy is introduced and carried through all the tissues by the blood; they are used in building up the wasting structures. In this process they are subjected to chemical change, and are resolved into carbonic acid and water. The process is one of oxidation or combustion. Electrolysis interferes with nutrition by producing a decomposition of these chemical compounds upon which the living structure depends.

It also interferes with cell-growth, by which the tissues are increased and nourished. In this manner the repair of the cells upon which living tissue is dependent is prevented.

It produces a caustic action upon the tissues by their contact with the acid and alkaline substances collected at the electrodes.

If the battery be one of the plunge type the plates should be immersed in the fluid before the electrodes are placed in position, and *vice versa*. The current should be slowly increased, one cell at a time, until the desired point is reached, and gradually decreased in the same manner. Much pain and annoyance may be avoided in this manner.

In discussing tumors by surface applications, treating strictures, etc., the applications should not be made too frequently. It is well to observe the effects of each application before making another.

Often the parts upon which it is desired to perform electrolysis are deep seated and then it becomes necessary to employ needles for penetrating skin and muscles. A great variety of these are offered for sale, but in treating superficial tumors, nævi, etc., I have found the ordinary steel sewing needle all that could be desired. Where two or more are used it is well to solder them to silver wires in order to insure good metallic contact. If large muscles have to be penetrated it is well to employ a lance-shaped needle. Where it is desired to avoid the effects of the current on the skin, the needles may be insulated to within a short distance of the point with shellac. This should be applied while the needle is warm and afterward rubbed smooth with fine emery. BARTHOLOW recommends coating the needles with a mixture composed of brown shellac, one drachm; Squibbs' solution of India rubber, one and one-half drachms; wood naphtha, two drachms. I have tried this and find that it gives a firm, smooth insulation. If it be desirable to produce an escharotic effect, needles of zinc may be used. The zinc decomposes and forms the chloride of zinc, which is destructive to the tissues.

As to the duration of the treatment five minutes of the maximum current will be found a safe rule to follow. This must of course vary with the growth operated upon and the resistance to the current.

Electrolysis needles should be carefully disinfected before being used, either by immersing in a strong carbolic solution or bichloride of mercury, the latter being used only with platinum electrodes.

Scrupulous care should be taken to have the needles always carefully cleansed and polished.

The wonderful progress which has been made in surgical electricity in the last few years entitles it to recognition as a reliable treatment in many affections.

CLINICAL NOTES ON JAMBUL IN DIABETES.

BY DR. A. R. ALLEN, CARLISLE, PA.

Some reports have previously been published indicating the value of Fluid Extract Jambul (Eugenia Jambolana *Lamarck*) in diabetes. The favorable results obtained led me to test it in a case of my own and recommend it for trial to my neighbor DR. HEMMINGER, who also had a case of diabetes under his care.

As contributing toward the establishment of the proper value of this remedy in the minds of the medical profession I offer the following clinical notes of my own case and that of DR. HEMMINGER, treated by a sample of fluid ext. Jambul obtained from MESS. PARKE, DAVIS & CO.

The history of the latter's case is incomplete, inasmuch as I have no facts bearing on it before the patient came under his charge. I will first give you his case. I should explain that the tests for sugar have all been made by the fermentation test. I could not get a reliable solution of FEHLING'S put up; at least one that I would trust, and preferred the fermentation test. The urine was allowed thirty hours for fermentation.

CASE 1.—(DR. HEMMINGER).

Mrs. W., married, several children, no family history. Noticed that she had incontinence of urine; was treated by several physicians with no benefit. At last consulted Dr. H., who put her on strychnia (which relieved the incontinence) and asked for a specimen of urine

which I examined; s. g. 1050; reaction acid, 40 grains of sugar to the ounce.

On April 10, when she was put on jambul, amount of urine in 24 hours was 7½ quarts. Eight drops of Jambul was administered three times a day, with the following result:

April 11, 7½ quarts.
April 12, 5 quarts.
April 14, 3⅛ quarts. Two cups of coffee, one glass of milk.
April 15, 3½ quarts. Two cups of coffee, one glass of milk.
April 16, 2⅜ quarts. Two cups of coffee, one glass of milk.
April 18, 2⅝ quarts. Two cups of coffee, one glass of milk.
April 27, 2 quarts; s. g. 1044; sugar 34 grains to the ounce.
May 9, 2 quarts; s. g. 1044; sugar 32 grains to the ounce.

Since then there has been no report on the case.

CASE 2.—DR. ALLEN. Mrs. E. T., colored, widow, two children, family history good. In October, 1883, noticed she was passing an unusual quantity of urine, consulted my preceptor who found she was suffering from diabetes, and put her on the opium treatment. This was continued with varying result, but at no time did she pass less than six quarts of urine in 24 hours.

In Feb., 1887, found she did not see so well as usual. I referred her to Harrisburg hospital where she had a cataract removed from the right eye, and now sees very well. During her stay at the hospital she was kept on tincture chloride of iron, gtt. v, three times a day. After her return, I tried codeine, iodoform, ergot, etc., but no improvement. On April 6th I put her on jambul, gtt. iv, four times a day. Her condition at this time was as follows:

Temp. 98°; respiration 18, pulse 83, weak and thready and intermittent. Bowels regular.

Urine, 11 pints, reaction acid, sp. g. 1,044, sugar 38 grains to the ounce.

April 11th, urine 11 pints; sp. g. 1044; sugar 36 grains to oz. Thirst not so marked, only up once during night to empty the bladder. Ordered jambul gtt. x, four times a day.

April 12, 11½ pints.
April 17, 12 pints.
April 18, 16 pints.
April 19, 15 pints.
April 20, temperature, 99°; respiration, 28; pulse, 92; urine, s. g. 1044; amount 11 pints; sugar, 38 grains to oz. The rise in quantity of urine was due to a "family jar," patient feeling stronger and better. Increased jambul to gtt. xiij four times a day.
April 23, 11 pints.
April 24, 10 pints.
April 25, 10 pints.
April 26, 10 pints.
April 27, 10 pints, temperature, 98°; respiration, 18; pulse, 83; weight, 106 lbs. Ordered gtts. v, tr. chloride iron three times a day.
April 28, urine s. g. 1044; sugar, 38 grains to the ounce.
April 29, 10 pints.
April 30, 10 pints.
May 1, 10 pints.
May 2, 9 pints.
May 3, 9 pints.
May 7, 10 pints.
May 8, 10 pints.
May 9, 10 pints; s. g. 1038; sugar 32 grains to ounce; weight 109½ lbs.; patient's general appearance better; has lost the haggard, pinched look; medicine agrees well, and patient is feeling much stronger.
May 10, 10 pints.
May 11, 10 pints.
May 12, 10 pints.
May 13, 10 pints.
May 14, 9 pints.
May 15, 9 pints.
May 16, 8½ pints.
May 17, 9 pints.
May 18, 9 pints.
May 20, 9½ pints.
May 21, 9½ pints.
May 22, 8½ pints.
May 23, 8 pints; s. g. 1036; sugar 30 grains to the ounce.

In these two cases all foods containing sugar or starch were entirely eliminated from the diet, and the thirst was controlled as much as possible. In my own case I could keep no record of the amount of fluids ingested, as the patient could not write. The measuring of the urine was done by her niece, who came once a day for that purpose.

These results were gratifying to DR. HEMMINGER and myself, as well as to our patients. My patient looks and feels better than for a long time, heart-action more regular, pulse fuller and soft, 80 to the minute, and is stronger. I intend to continue the use of the drug as long as she receives benefit from it. It does not nauseate and agrees well with the stomach. It will take its place as one of the recognized remedies in the treatment of diabetes as soon as its value is made known to the body of the profession.

THE BERGEON TREATMENT.

BY E. B. WARD, M. D., LAINGSBURG, MICH.

If there is any one thing respecting a theory in medicine which more than another commends itself to the busy and possibly brainy practitioner of the healing art, it is reasonableness.

Thought is a necessary article even in the make-up of a country doctor, in order to ascer-

tain if a theory corresponds with his reason as founded on fundamental truths and individual experience. Otherwise he is continually floundering in the mire of uncertainty or treading around in the same everlasting rut.

Theories come and go like autumn leaves, but truth remains. Facts are stable and the sieve of reason separates the grain of truth while the breath of common sense winnows away the feathery flakes of fancy.

A glance at our medical literature in all its increasing prolixity and endless variety, shows a constant tendency to what might properly be called literary abortions. Half-matured and ill-conceived theories are constantly being thrust upon the reading physician, and their progenitors have the gall to ask that they be put in swaddling clothes and nursed into life by the profession.

Young men with less limit to time than to experience, fly to pencils in the absence of patients and flood the medical periodicals of the day with the results of indigestion and a fair library to cull from. What they need is a blue pill at bedtime and Rochelle in the morning.

Still, what would we do without the theorist? We would progress slowly, and it is only when extreme and outlandish over-reaching impossibilities are put out that it is time to call a halt.

This brings me to the Bergeon theory of treatment for consumption, which has now been in the hands of the profession long enough to establish its value, and it stands to reason as day does to night—it is there.

The only singularity about the matter is that knowing the cause of consumption—mal-assimilation of food and its consequences—men should have been so long in ascertaining that the H_2S—the sulphuretted hydrogen gas, was not assimilated in cases of tubercular disease. Why, the thing is so plain after reading William's Principles of Medicine that the wayfaring man tho' a disinterested and driveling idiot need not err therein.

Nature has provided a self-generated poison for the bacillus tuberculosis, but in a certain proportion of cases the H_2S is not generated or not assimilated in sufficient quantity to perform its function and the colonies of bacilli increase, grow and thrive; local inflammation follows and consequent suppuration and disintegration of tissue, and consumption. Now if that isn't a plain statement of fact I don't know it.

What we want, understand, is a weapon loaded with "gases of bad odor," with which to fight the ferocious bacillus tuberculosis, and the worse it smells, the better! This treatment, in common parlance, absolutely "stinks 'em out," and they not only move out, but go of their own accord and take their families with with them. If they can't move out, they die, because they cannot stand a bad odor any more than a school committee or a board of prison inspectors. I have not seen it suggested, but it seems to me, out here in the country, that sewer gas would answer, and might be supplied to city patients at trifling expense above the ordinary illuminating variety. This idea, furthermore—as city patients breathe constantly more or less sewer gas—I say this may account for the fact that the percentage of deaths from consumption is less in the dens and slums of New York city than on the hills of Maine or among the mountains of East Tennessee, where they breathe the purest air and drink the cleanest water that God ever made.

Everything goes to substantiate this BERGEON theory: reason, common sense, experience and statistics. Furthermore, it has been the merit of ease and elegance of administration. Why, the treatment is absolutely "grateful" to the patient, DR. BERGEON says, and in fact it is simplicity itself in all its details. The only wonder is that men should live so long and know so little about so simple a matter.

The result of my investigation in this mode of treatment it is at present impossible to give, on account of the illness of my office boy, to whom I entrusted the administration of the remedy, for obvious reasons. Life is too short for me to knock my nostrils out of gear in order to test any theory.

I used for injection stagnant water from an old unused well on my farm, on account of its odor. It will twist the bill off from a carrion crow and paralyze a dog fresh from a tan-yard.

When the boy recovers sufficiently so that he can talk again, I shall be able to make my report. In the meantime I may say shat the cases on which the treatment was tried are all alive yet and their family attendants still linger along.

A CASE OF LUPUS EXEDENS NECESSITATING AMPUTATION.

BY J. J. MULHERON, M. D., DETROIT, MICH.

I believe the destructive action of lupus on a limb to the extent of necessitating amputation of the member, is a comparatively rare occurrence, in this country at least. A case of this nature recently occurring in my practice illustrated such ravages of the disease. The patient, an intelligent gentleman and arrived at the age of forty-nine years, first detected the onset of the process six years ago and believed it to be the result of an injury sustained from the rebound of a twig while leading his company through a thicket, in an engagement with the enemy in the war of the rebellion. The blow was a very sharp and painful one on the right wrist. The pain, however, quickly subsided, but recurred from time to time through the subsequent years, until the appearance of a number of isolated nodules be-

neath the skin of the palmar side of the wrist. These in a short time became inflamed, and suppuration and ulceration followed. The nature of the affection was promptly recognized by the physicians whom he consulted, and for five years he was subjected to the usual caustic applications, which, however, had little or no influence on the course of the disease, although they seemed to check the progress of the ulceration up the arm, to which it had extended.

I was called in to see the case May 17th, finding the patient in extreme pain and presenting the lines of prolonged suffering in his face. There were two sinuses opening on the wrist. The extensive ulcer had soft, inconspicuous edges, with flattened, granulating floor, and discharged quite profusely. Placing the patient under an anæsthetic, I probed the sinuses and found the lower end of the radius and opposing carpal bones denuded of their periosteal covering and extensively necrosed. On his recovery from the anæsthesia, I advised amputateon, to which he readily consented, and on the following day I amputated, by the circular method, two inches below the elbow, the high amputation being deemed advisable in order to avoid the scar tissue which remained as a result of previous extensions of the ulceration. The recovery was complete, and at this writing (three weeks after the operation) the amputation wound had entirely healed.

ALCOHOL IN MEDICINE.*

BY C. BINZ, M. D., PROFESSOR OF THERAPEUTICS, BONN.

Since that time—and indeed much earlier—when the shrewd Christian missionary, St. Paul, with his extended experience, advised his pupil Timothy to drink wine instead of water because his stomach was weak, and he was often ill, down to our own day wine has never ceased to be a medicine. But as everything circles round in everlasting change, so in the case of wine. In consequence of the progress of the healing art, from thirty to fifty years ago it was nearly proscribed. In 1844 DR. KIRCHGASSER felt himself obliged to publicly vindicate himself for ordering his typhus patients pure champagne instead of freely diluted wine. C. O. WEBER, the distinguished Heidelberg surgeon, gone alas, too soon! said in 1865 that it was a serious matter to give wine to patients suffering from fever, as the English did, that wine was injurious at the commencement of all fevers, that it raised the temperature he had repeatedly satisfied himself of it by thermometric observations. To-day we have progressed so far with what our fathers and teachers placed under ban, that representatives of scientific medicine think themselves called upon to utter a caution against the use of alcohol at the bedside. First of all we were met with the dogma that alcohol was not a stimulant. What stimulating properties had been attributed were only the results of commencing paralysis of certain nerve apparatus, never of a direct vivifying. Spirits of wine had only a paralysing action. Even the apparent cerebral and cardiac activity proved nothing. The former was produced by depression of the principal central parts in which we elaborate judgments and criticisms of ourselves and of the outer world; the latter by all the external stimuli subject to which we were in the habit of consuming alcoholics. That alcoholic drinks aided digestion was a complete deception. The exact opposite of this was the case, even with moderate doses.

The experiments undertaken in the way of establishing the stimulating action of alcohol were then detailed, showing that alcohol strengthens the pulse, or causes stronger and quicker contractions of the left ventricle; this therefore does more work in a given time, and its pauses are shorter. The blood moves more freely than usual through the capillaries. ALBERTONI and LUSSANA, of Padua, have measured the blood-pressure of dogs to which alcohol had been given. If the dose was small, if it reached the heart slowly, arterial pressure was heightened. In other cases it was lowered.

As regards respiration, this, next to the action of the heart itself, most important vital function, nothing has been determined by any experiments up till lately. This has lain in the incompleteness of the methods employed. ZUNZ has been the first to show that small quantities of alcohol increased respiration in healthy individuals, *i.e.*, the quantity of air inspired and expired, by an average of nine per cent. All this we must confess is not much. It even seems right to attribute the increased pulse-rate to the dilatation of the arteries and capillaries, for we know that the heart works with more power as soon as the arterial channels become wider. That is a compensating arrangement for keeping up the blood-pressure, which with an equable quantity of blood equals the product of the strength of the cardiac contractions with the number of them and with the narrowness of the arteries. The second increases as soon as the third gives way. But this consideration does not hinder the possibility of employing alcohol usefully in disease where the freer, fuller flow of blood to the vital organs may be a vivifying and life-saving stimulant.

As regards the influence of alcohol on the secretion of the digestive fluids, it is correct that the majority of the theoretical investigators believe that they have determined a re-

*Address delivered before the Seventh German Medical Congress Wiesbaden.

tardation of the process under its influence. But there is no lack of experimental contradiction to this. It appears to me in the first place that here also the large or small dose has the casting vote, and that, secondly, in diseased conditions, the matter might be quite different to what it is in health. Practical experience has to solve this part of the problem. The solution will not be everywhere against alcohol as an intestinal stimulant. Everyone has opportunities of proving that mild forms of dyspepsia are often removed by the stimulus of small doses of a good concentrated alcoholic.

A matter of great importance is the decision as to the nutritive value of spirits of wine in disease. We can by this naturally only mean the respiratory value, not its value as a builder up of tissue. With the view that alcohol passes out of the body *en totalité et en nature* there could not of course be any talk as to its nourishing power. This view had become so firmly grounded that earlier German labors with an opposite result, a later English refutation, and fresh researches of my own pupils are not able to make headway against it. A thorough investigation in my laboratory had given the result that with moderate doses of alcohol, most passed out through the kidneys and lungs, a much smaller quantity through the skin, and not any through the intestine. Altogether about three per cent. passed out. HEUBNER, in conjunction with the author, had before ascertained that in pyrexial diseases the excretion of undecomposed alcohol through the kidneys was within the above-named low figures, and often nothing at all. Alcohol can only be burnt off in the system into carbonic acid and water. When it is burnt, however, it produces warmth, and this can be made use of, as a vital power for keeping up movements without the continuance of which we could not exist. This simple arithmetical use of calometrical works shows that a litre of medium Rhine wine is equal in nutritive value to five or six meat-spoonfuls of easily digestible oil, over which it has the great advantage of immediately and directly raising the functional activity of organs, and of passing without difficulty into the lymph- and blood-channels. Above all, however, albumen is spared. The physiology of nutrition teaches us that the decomposition of albumen is slight, so long as there is a supply of hydrocarbons, or other combustible substances present.

In agreement with this, we see in the urine the products of the decomposition of albumen diminish when moderate doses of alcohol are taken. That is a fact concerning which all investigators have been agreed, the only one in the whole pharmacological question of alcohol in which no marked contradiction has cropped out.

So far as theoretical investigation has anything to say, I hold the question: Is alcohol a food? to be settled in the affirmative. How, however, does the teaching of modern pharmacology agree with this fundamental truth, where alcohol affects temperature measurably it does so generally in the dieection of reduction? The answer of this question conducts us to the third chief property of alcohol, that of a reducer of body warmth under certain conditions. When some physicians give alcohol in large doses in pyrexial diseases an improvement of the general condition is often observed. This could not happen if the general view were correct, that it heated; consequently as regards fever heat, it is at least indifferent. In healthy adults, the introduction of small doses, especially in a concentrated form, causes a distinct feeling of increased warmth in the stomach and later on in the skin, but no change in the thermometer placed in the rectum. Narcotising quantities lower the body heat several degrees, and for several hours. The cause of the deception under which the drinker of alcohol labors lies in two local conditions: the stimulus dilating the blood-vessels of the stomach, and dilatation of the cutaneous blood-vessels. Both are perceived by the nerves of both organs as increased warmth, and as we are accustomed to estimate the marmth of our bodies by the feeling of warmth in the skin, it could not be otherwise than that, up to the time of accurate thermometrical measurements, alcohol should pass as an undoubted warming agent.

All that I dave said in favor of alcohol, relates to the diseased individual. The healthy man needs no stimulant for his heart, his circulation, his respiratory centre, his stomach, and his intestines; he who is sufficiently fed requires no sparing agent for his body, no substitute for his albnmen; the apyrexial individual requires no cooler for his warmth. If the healthy man takes alcohol in any form it can only be done under the name of pleasure, or under that of refreshment, after severe mental or bodily work. In both cases, however, moderation is the indispensable condition, for close behind lies the poison garden of alcohol with its numerous, many-visaged species.

Correspondence.

SPINAL IRRITATION.

Having been somewhat interested in the subject of the title of this article, I contributed a report of what I regarded as two well-marked cases of the disease to the March 10th number of this journal. It seems that, in some inexplicable manner, I was so unfortunate as to incur the displeasure of DR. SPITZKA, of New York, an alienist of some note.

My object in reporting these cases was to

direct the attention of the readers of the AGE to the fact that they might enhance the interests of their patients, and their own reputations as well, by a change of classification of some of the incurable or bed-ridden cases which now and then come under the care of every general practitioner. As to the pathology of the disease, I expressed no opinion; I simply called attention to the fact that the grouping of these symptoms together, and the giving them a separate place in the nomenclature of nervous diseases, was clinically of great assistance. That is the point I aimed to make, and I still think I succeeded, DR. SPITZKA to the contrary notwithstanding.

I now beg DR. SPITZKA'S pardon for calling his attention to what to the average medical man appears to be inaccuracies of statement.

The doctor alleges that "the subject of spinal irritation was not assigned to him by the editors of PEPPER'S System." He also asserts that "whole chapters are devoted to it (spinal irritation) in every text-book on nervous diseases."

Will DR. SPITZKA please point out the "whole chapters" devoted to it in PEPPER'S System? Will he name the author who discusses it?

Does any other writer in PEPPER'S System devote as much space to it as he himself does.

DR. SPITZKA says, on page 201, MEDICAL AGE, "Inasmuch as not only whole chapters are devoted to it (spinal irritation) in every text-book on nervous diseases, and special institutions exist for its treatment on both sides of the Atlantic, etc." Will DR. SPITZKA explain how he reconciles this statement with the fact that the editors of PEPPER'S System recognize no such disease as "spinal irritation." Will he also please name the locations of some of the "special institutions on both sides of the Atlantic" for the treatment of spinal irritation?

Further, I am charged by the irate doctor with misrepresenting him. Here is the paragraph in question (page 802, Vol. 5, PEPPER'S system): "The majority of writers have therefore contented themselves with making a careful clinical study of the mostly subjective signs(?) of disorders which, once designated as spinal anæmia and hyperæmia, are now classified under the non-committal titles of spinal irritation and exhaustion (neurasthenia) as in this volume"(?) I inferred from this language that DR. SPITZKA was not "a firm believer" in the "existence of spinal irritation as a distinct affection."

I will leave the question as to whether my inference was justified or not, to the candid readers of the AGE.

My classification is also called in question; in fact my innocent little report seems to DR. SPITZKA to be "A Comedy of Errors."

One of my cases is diagnosticated as "delusional insanity." Does DR. SPITZKA deny that delusional insanity may be a symptom of spinal irritation? DR. HAMMOND remarks that the mind was affected in every one of his cases of spinal irritation, and in two there were attacks of maniacal excitement every day. Besides, there is the stubborn fact that treatment addressed to the spinal irritation relieved it and the consequent mental trouble.

On page 803, Vol. V, PEPPER'S System, SPITZKA, writing on spinal anæmia, says: "No one has gone further than HAMMOND in erecting a theoretical anatomical framework which elaborately provides for the accommodation of the various symptoms of spinal anæmia."

On page 201, MEDICAL AGE, he says: "He is justified in withholding his assent to views and classifications, which he and the majority —in fact nearly all—of writers regard as premature and 'not proven.'" Very well!

On page 763, Vol. V, PEPPER'S System, DR. SPITZKA, writing on cerebral hyperæmia, says: "It naturally follows that pathological hyperæmias are both possible and probable, and even if the observations in the dead-house *do not* strongly sustain the existence of pathological hyperæmias and congestion *independently of gross disease, clinical analysis and the gratifying results of appropriate treatment justify us in these designations in our nomenclature*, with the limitations here implied" (italics mine). How is that for consistency?

One point more and I am through: I am charged with writing "singularly confused paragraphs." Perhaps I do. I congratulate myself, however, that I do not write of "subjective signs," nor of "insomnia with restlessness variegated with unpleasant dreams" as does the learned Professor of the Poliklinik, nor do I lose my temper without provocation. I simply reported these cases as an aid to other general practitioners. I did not intentionally misrepresent the Doctor, for whom I entertain the greatest respect, and if I misunderstood him I have the consolation of knowing that the average practitioner, for whom PEPPER'S System was written, will also misunderstand him.

A. J. ROSENBERRY, M. D.

WAUSAU, WIS.

HOT-WATER TREATMENT OF CARBUNCLE.

I recently noticed a new treatment for carbuncle, published in the Therapeutic Gazette. M. POLAILLON is the author of the said new treatment, which is by the introduction of bars of caustic chloride of zinc in the carbuncle. He bases his treatment on the fact that carbuncle is caused by a microbe. While I agree with him as to his theory, and believe that his treatment is an improvement on the old method —the crucial incision, emollients, baths, etc.—I am impressed with the belief that I have dis-

covered and used a treatment better than either of the above-named.

Having had, during the past twenty-eight years, considerable experience in the treatment of carbuncle—which was by the old treatment alluded to above—I have invariably found it a slow, painful, unsatisfactory process, requiring from three to six weeks for the patient to reach convalescence; yet all of my patients recovered.

Last July I was afflicted with a carbuncle, just over the upper portion of the sacrum, which by the fourth day became exceedingly painful, so much so that I could find no easy position. The carbuncle had become at least four inches in diameter, was pointing in several places, was deeply inflamed, swollen, greatly congested and exceedingly sensitive to the touch. I began to imagine how some "long-nosed doctor" would look, and the agony I would be made to suffer, while he, with a keen sharp bistoury, would be going for the "true inwardness" of that peculiarly sensitive plant. Well, the mere thought or dread of it was repulsive and nauseating in the extreme, causing a weak feeling, a "sinking sensation," in the region of the heart. Naturally about this time I began a thorough study of the pathological condition of that carbuncle—greatly swollen, hard, circulation impeded—the parts getting ready to die—that condition, perchance, to be followed by septicæmia, next, probably, death. It is astonishing how rapidly one's thoughts can run when superceded by an intensity of personal suffering. I concluded that it would be a "proper thing to do," to "fight the devil with fire." I had already taken constitutional treatment to relax the system and subdue inflammatory symptoms; but no improvement was manifest. I was growing rapidly worse—had not slept for two days and nights. I called for a pot of hot (boiling) water. Had an attendant to take a common towel, folded so as to make it about six inches square, and dip it into the boiling water, then applied it immediately to the naked surface of the carbuncle. The attendant feared that the boiling water would scald the parts; but strange to say it did not, but relieved me from pain almost instantly. I continued the hot-water applications about every five minutes for one hour, then slept sweetly throughout the entire night. Next morning improvement in the carbuncle was very perceptible. I used the hot-water applications again for one-half hour. That day I visited a number of patients and suffered but little. At night I used the hot water treatment again for a short time. Rested well all night, and, on examination next morning, found the carbuncle almost gone. It was quite small and suppurating something like a small common boil. The carbuncle gave me no more suffering or trouble. It was entirely well within one week from the time I commenced the treatment.

Now I am of the opinion that this treatment is *the* treatment for carbuncle. I sincerely believe it will abort any case in forty-eight hours.

The treatment is founded upon common sense. We regard hot water as one of the best relaxing agents we possess. It relaxes and dilates the vascular system, re-establishes the circulation in the parts, and gives nature a chance to perform her functions. Then again, if the theory is correct that a carbuncle is caused by a microbe, the cooking process is indicated, because it will most assuredly destroy the germs in the purulent focus. I feel sure that this point can be reached without scalding the patient.

Believing this to be a very simple, yet important discovery, I send it to you in order that you may publish it, if you choose, as an item of interest in your valuable journal for the profession generally.

J. C ABERNETHY, M. D.

RHEA SPRINGS, TENN.

A CASE OF RABIES.

MR. EDITOR: With your permission I will place upon record a case of rabies with some anomalous features:

On 13th of May, Apollo, a very sagacious young shepherd dog, manifested great lameness in his front foot, and being a great pet of my little son, I was called in the case. Before examination no lesion could be detected, but it gave such great pain that Apollo would take my hand in his mouth, not to bite, but merely to make me desist. When I did so, he would lick the hand in appreciation of the kindness. Soon the pain had increased greatly, associated with slight spasms. As rabies had not then been suspected, no case having been heard of in the community, these spasms were supposed to be tetanic, and morphine was given in ¼ gr. doses, which calmed him to some extent but did not cause sleep. He took regularly his food, milk and raw beef, and a cupful of water at times without difficulty.

Tuesday the spasms had increased in violence though the morphine was increased to ½ gr. doses.

Wednesday the spasms were still violent although kept somewhat in abeyance by the morphine, which was now increased to 1 gr. doses. He still continued to eat and drink when free of spasms. Nor did the offering of food seem to induce spasm. At this time I learned that he had been, about two weeks previous to his attack, in company with a dog supposed to have had rabies. At this time partial paralysis supervened, hemiplegic in character. I now became convinced as to the character of the disease and had him killed

I desire to emphasize some of the remarkable characteristics of the disease, viz., he never refused to eat or drink at the last hour of his life. He never at any time, even when the spasms were most violent, lost his intelligence or self-control, and never attempted at bite me, although biting savagely inanimate objects surrounding him.

N. L. HORNSBY, M. D.

No. 6615 Michigan Ave., St. Louis Mo.

COLLEGES AND DOCTORS.

The position which you take in regard to the influence of the existing number of medical colleges on the number of practitioners who exist (with great effort, in many cases) is, in the main correct. The diploma mill differs from other mills, in the fact that the grist which goes into its hopper goes in voluntarily and is not absolutely under the dominion of the miller. And yet, I cannot but think that the existence of the large number of medical colleges has an influence in determining the young man's choice of a vocation. Unquestionably the position of professor in a medical college rsises the incumbent in the estimation of the community. Other things being equal, the college professor has the advantage over the every-day practitioner, and, doubtless, the possibility (which is rendered less and less remote by the increasing number of colleges) of achieving the proud distinction of a professorship, has its effect in determining the young man's choice. When, indeed, we look at the *personnel* of our college faculties, what do we discover? Men who have won the one-time honorable position through long years of honest effort in penetrating the arcanum of medical science? Men whose collegiate and medical educations combine to raise them above mediocrity? Men who are fitted by nature to impart to others what they know?

Yes, we find such occasionally, but the occurrence of these qualifications in conjunction with the professorship, is a mere coincidence. The qualifications do not determine the choice of the man to the position. A little money and not a little toadying to those who have a little money, go much farther in determining such choice. And this is true of all our medical colleges, with here and there, of course, an honorable exception. I know a professor in a reputable medical college who spells water with two t's, and others who, while they may be excellent doctors, commit murder most foul of the queen's English.

No, I do not think the number of our medical schools is half as demoralizing as their quality. There is as much room for reform in the matter of education, in the chairs, as there is in the benches.

A. B. R.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., JUNE 11, 1888.

Editorial.

FEES FOR MEDICAL WITNESSES.

We took occasion recently to reproduce portions of an address by a learned member of the bar, in which he gave some excellent advice to the physician who appears as such on the witness stand. Unfortunately, the learned gentleman presented no suggestion of any means through which even the ideal medical witness whom he depicted, might recover a fee commensurate with the scientific knowledge which is required of him. His advice on the subject of the physician's demeanor was somewhat gratuitous, and it would have been more acceptable had it been seasoned with a little of such advice as his education especially qualified him to give. Lawyers, however, are not prone to give either public or private counsel without remuneration, in which respect they set physicians a laudable example. The instances, furthermore, in which a lawyer has been placed on the witness stand and compelled to give expert testimony, are exceedingly rare.

The question of the medical expert's witness fees is a constantly recurring one, but with each recurrence there is defeat of the doctor. There is, notwithstanding, an unaccountable apathy on the subject, in so far as the action of medical associations is concerned. Any steps which have been taken in regard to it have been very desultory, and until the profession takes hold of the matter with more vigor than has characterized all previous efforts, the complainings to which we are periodically treated had better be bottled up. It is a subject which demands the attention of state societies and the National Association. It is vastly more important than any of the numerous ethical questions which have from time to time agitated these bodies from centre to periphery. But pending associate action there is a work to which the individual can attend. In most instances in which the medical man is placed on the witness stand it is with his consent, if not, indeed, at his own instigation. While the subpœna is imperative, interested

parties usually do the necessary amount of private interviewing before sending the instrument forth, and memory can recall but very few instances in which the witness' views have not been previously obtained.

The remedy against the injustice complained of, is in the physician himself. Let him when interviewed by the attorney refuse to express himself until he has satisfied himself of the object of the questioning, in anticipation in which let him fix and collect his fee. The difficulty has heretofore, it is to feared, lain in a certain element of human nature, rather than in the law's exactions. Physicians go on the witness stand, in many instances, to gratify a desire which has its origin in other than the promptings of the unalloyed sense of justice. Sometimes this desire has in it an element of personal antipathy to one of the parties to the suit, and sometimes the uncontrollable yearning for notoriety is the incentive. It is safe to affirm that very few medical witnesses are obliged, *nolens volens*, to take the stand.

This matter of medical witness' fees comes up periodically across the water as it does here, and is even now again coming in for its share of fruitless discussion. A. J. SEMPLE, F. R. C. S., made it the subject of a recent address before a meeting of a branch of the British Medical Association. The following extracts from the address require very little adaptation to make them applicable to this western world:

"I may mention that if a medical witness means to insist on having his fee before giving evidence, he must do this before he is sworn, otherwise the objection would not be sustained by the court. In civil trials the judge, as a rule, readily assents to the witness's proposition, since he knows that if a party shows unwillingness to pay the fee before the evidence is tendered, there is every probability of his not paying it at all. Moreover, he knows that when a man is compelled to give evidence under protest, he does not make the best of witnesses; he may give the truth, the whole truth, and nothing but the truth, with legal exactitude; but then, you know, there are different ways of speaking the truth—it may be done or without embellishments. In criminal charges the judge is less tolerant of a witness's objection to be sworn, since the prisoner's liberty, or it may be his life, is at stake. If a medical man suspects beforehand that the payment of his fee is problematical, he should inform the party who intends to call him, some days before the hearing or trial, that he will appeal to the court for permission not to be sworn until he receives a written guarantee, or a verbal pledge made openly in court by a solicitor, to the effect that the stipulated remuneration shall be forthcoming. Not long since I took a written security in court for my fee, and although my client obtained the verdict, I learned subsequently that he would have paid me only one-fifth the amount had I not possessed a legal claim against him.

"The question of fees is sometimes a delicate one, and requires some tact in dealing with. From a varied and not trifling experience, I can say that you may safely ask for a guarantee from a solicitor that your charges will be met by him if the principal fails to carry out his contract. If a solicitor tries to satisfy you with a verbal promise, you should strongly suspect his sincerity. Of course I am not referring to individuals or firms known to the medical man as of good repute, because in that case you may place implicit confidence in their honor, their word being as good as their bond. In any case, however, it is well that the exact amount of the fees should be agreed upon and particularized, whether for consultations, examinations, or attendances and giving evidence in court. If a solicitor has a client of doubtful solvency, he will insist upon having your fees paid before requiring you to act. A solicitor acting for a client cannot be sued as a principal.

"There is another caution that may not be untimely or misplaced. You are aware that the Employers' Liability Act enables a man to claim compensation for personal injuries received through the carelessness or negligence of his employer personally or by his agents. Obviously the greater number of claimants are persons likely to seek advice and aid at hospitals and dispensaries. You would be mistaken if you supposed that their questions as to the nature, extent, and probable duration of their injuries were free from guile. Having got the information they desire from the medical man, they ask, with every appearance of innocence, for a certificate. Whenever I have the least suspicion, and in fact in nearly every case of the kind under consideration, I ask the patient, "Are you going to bring action for damages." If I receive an affirmative answer, I refuse to give a certificate, and take care to have no particulars beyond the patient's own complaint placed on the prescription paper. If he is an in-patient, I give orders that the note-book shall be kept from inspection by the patient or his friends. The same warnings serve, though with less force and frequency, in private practice."

HYPODERMIC INJECTIONS OF CALOMEL IN SYPHILIS.

Intramuscular injections of calomel were first practiced by SCARENZIO, in 1864, but the treatment was not brought prominently before the profession until 1885, when NEISSER, of Germany, wrote on the subject. The method has not as yet found very much favor, either in England or in this country, probably because of the fact that little has been said of it in the

journals. The advantages claimed for it over the methods in vogue are the following:

A. As over the administration of the preparations of mercury by the mouth:

1. The absence of any directly unfavorable influence upon the digestive apparatus (nausea, loss of appetite, colic, diarrhœa), especially in cases where mercury in sufficient doses is not well borne.

2. Precision of dosage.

3. Control of the administration by the physician, and, therefore, better opportunity especially in private practice, to observe the effect of the drug, as well as the general condition of the patient, at fixed intervals.

4. Simplification of the treatment as regards the patient himself, and diminution of the liability of his condition becoming known.

5. Promptness of action.

6. Diminished risk of salivation.

B. As over treatment by inunction, in addition to the above advantages, we have:

1. Absolute cleanliness. This point is of much importance in private practice. Mercurial inunctions are not acceptable to the better class of patients, and are feasible only in cases where the symptoms are urgent, and the patient fully realizes the gravity of the situation.

2. Convenience of administration in all respects.

C. As over the treatment by fumigation, etc., in addition to the above, we have:

1. Comparative safety of the method of treatment.

2. Absence of the necessity for attendants, and for the use of apparatus of any form on the part of the patient.

D. As over other forms of treatment in ordinary use, the fact that stubbornly rebellious symptoms often yield with promptness to hypodermic injections of the insoluble salts.

The advantages of this treatment, as compared with the methods in general use, are: 1. Pain; 2. Danger of the formation of abscesses.

The validity of these claims has been tested by Dr. J. C. Wilson, of Philadelphia, who reports, in the Medical News, his experience with the treatment in a series of a dozen cases, including sixty-nine injections. Touching the objections to the method, he says that while they have some force they may be largely avoided by introducing the needle at right angles and carrying it deeply into the muscle. The observance of strict antiseptic precautions is also important. The instrument as well as the skin at the point of puncture should be rendered thoroughly aseptic. The region best adapted to the injection is the lateral aspect of the gluteal region in the fossa behind the great trochanter. Dr. Wilson's formula is calomel by vapor gr. j ½, and glycerin 15 minims. He orders the doses prepared separately by the druggist, in drachm vials.

A number of these vials are ordered at once, and are protected from the light. At the time of using, the cork is removed and a few minims of recently boiled water are forcibly injected from the needle of the syringe into the bottle in order to displace the calomel that has settled. The bottle is then thoroughly shaken until the calomel is suspended. The mixture is next poured into a little conical porcelain capsule, and quickly taken up through the nozzle of the syringe. The needle is then adjusted, the air expelled, and the operation performed in such a manner that the drug is thrown into the muscular mass. A grain of calomel, approximately, is the usual dose. The formula calls for one and a quarter grain for the reason that notwithstanding the greatest promptness, a certain amount of the calomel remains at the bottom of the capsule, and a little in the syringe itself.

The antiseptic precautions consist in thorough disinfection of the apparatus employed immediately before each injected by means of water boiled for some minutes in a test-tube, and in the careful cleansing of the skin at the point of puncture, by a solution of corrosive sublimate 1 : 1000. Burning pain usually follows, lasting for some minutes, and the circumscribed deep infiltration, which may be detected under the injection, becomes the seat of moderate tenderness, and more or less induration, lasting for some days, or even a week or two.

The conclusions from Dr. Wilson's report are favorable to this method of administering mercury in syphilis.

MAN, THE BEAST.

Periodically the sexual function, in its various forms of aberration, comes in for a liberal amount of discussion in medical periodicals. This is the only medium through which such a subject may be discussed with any degree of freedom, such is the sentiment of refined society thereon. This is unfortunate, for a large share of the ills which afflict the human race arise very directly from an ignorance in this direction, which can only be dissipated through the press. And yet, it would be a very difficult matter to erect a barrier between physiological interest and sensuous feeling, in the minds of the young merging into maturity.

Several female writers have, within the past year, come boldly to the defense of their sex against the very general impression among maledom that females are possessed and dominated by like passions with themselves. The latest champion of her sex is an anonymous writer in the Journal de Medicine de Paris, whose article is translated into English by the

Cincinnati Lancet-Clinic. We have room only for a few paragraphs of her spicy paper:

"Men deceive themselves strangely when they imagine that the genital sentiment is dominant among women.

Women sometimes develop this sentiment by education, but it is always the man who induces this sentiment.

She loves him, and throws herself into the arms she loves; she is willing to be subjugated; she implores it as a favor. There is, in woman, an amorous feeling or weakness that demands the protection of masculine strength. She is the ivy that loves to cling to the oak.

Man is a sensual being, and woman is obliged to take him in the wild state she finds him; passion has no refinement in man, he is an animal.

When a woman becomes sensual, it is by assumption and not in reality. We are passive because we desire to wield an all-powerful influence over him we love.

The man turned over to us by marriage must be tamed; happy that woman who has the talent to conquer his brute nature.

By a feminine abandonment, seemingly unconscious, but really studied, we awaken his genital aspirations.

If we afford him pleasure, it is because we desire to please and propitiate him. It is only natural to offer the choicest flowers to our idol.

Because woman sacrifices herself for man she is accused of sensual sentiments, and is said to be perverse.

No man who is refined, gentle and merciful, can say that woman is not naturally pure and above the sexual sentiment. If woman knows that man is content with chastity, she never seeks to unveil his sexuality. We are content with marital honesty—it is man who is dishonest.

If some women become frightfully sensual, it is from association with a sensual beast. A wicked wife is the mere reflection, too often, of a husband with strongly developed animal instincts.

When the sexual fire is once awakened too strongly in woman, the conflagration proves disastrous to all who come in contact with such an unsexed being; all virtue disappears, and the riotous reign of infidelity commences.

I am ashamed to express such sentiments even under my feminine *nom de plume*. When I was a young girl, I dreamt of a pure love. I saw in my future husband, one of Nature's noblemen; a man of great aspirations, chaste sentiments, and lovable qualities. I had read romances like many another silly girl. It is well that the feminine soul revels in fiction before entering the realities of the marital state.

Need I state that my dis-*illusion* came very rapidly, as it does to every pure-minded girl?

The being of whom I dreamt was great and noble; my ideal of all that was good and pure was very wicked; he was very good before the world, but let us drop the curtain. All women with whom I have compared marital notes, agree that men are much the same the world over.

Woman, after marriage, finds man to be only a sensual being, no matter whether he be prince or peasant.

Woman has need of man, and it is best to take him always on his weak side.

But it is wrong for man to say that woman has sensual sentiment; we are as you will, but we belong to you."

HARD TIMES AMONG FOREIGN DOCTORS.

Dr. Garnett in his presidential address before the late meeting of the American Medical Association traced the *fons et origo malis* of the hard times among doctors in this country, to the alleged disproportionate number of medical colleges. His argument, condensed, was that there are too many doctors, that medical colleges make doctors, and, therefore, by suppressing the medical colleges the supply of doctors would be cut off. He pointed to the way they do things in Europe as a way which should be followed here, and, by inference at least, declared that country to be a doctor's paradise—the fewer colleges there preventing the many graduates in medicine, which he held to be the bane of the profession here. Arguments are, of course, always convincing, but in the absence of facts. A single fact will put to rout an army of arguments, and we have in a statement of the Internationale Klinische Rundschau, a complete refutation of Dr. Garnett's theory. The scene is in Prague whence comes a sad lamentation over the decline of medical practices, a very large number of the practitioners there not realizing $500 a out of their work. It is not claimed that there are too many medical colleges there, or that the standard of graduation is too low. On the contrary, the medical colleges are few, and they teach medicine very thoroughly. The number of doctors is, however, notwithstanding the fewness and excellence of the colleges, out of proportion to the needs of the population.

That the number of medical practitioners is too great for the prosperity of those engaged in that avocation, there can be no doubt. There are very few communities in which one-third of the existing number of doctors could not comfortably render all needed medical aid, and still have sufficient time at their disposal for self-improvement. But that the excess is due to the number of medical colleges which exist, is little more than an assumption. The difficulty must be sought for in some other

direction. As long as young men continue to convince themselves that a profession is more honorable than a trade, that the chances of emolument and preferment are greatest in that channel, medicine as well as law and divinity will continue to attract more students than their necessities demand. The only remedy for the evil (for evil it unquestionably is) would be unconstitutional, under our form of government. In some countries, in Canada, for instance, the number of dealers of certain kinds is regulated by law, in accordance with the size of the population in respective communities. Could our authorities prescribe a certain ratio of doctors to people the evil of the "over-crowded profession" could be promptly remedied. But this they can not do, and the only hope which exists for the individual doctor lies in the line of the doctrine of "the survival of the fittest." When men become convinced that they can make money faster and achieve respectable standing as readily in other callings as in that of medicine, the number of doctors will commence rapidly to grow less. Until then the present degree of "over-crowding" will continue.

TRACHEOTOMY WITHOUT THE CANNULA.

All who have had experience in the operation of tracheotomy can testify both to the frequent difficulty of inserting the cannula and to the inconvenience of the irritation it causes *in situ*. Few, however, have ever considered the possibility of a tracheotomy without the tube, desirable as the omission might be felt to be, and the suggestion of such possibility and instructions how to accomplish it, by DR. THOMAS ADDIS EMMET, in the N. Y. Medical Journal, of the 2nd inst., will be received with pleasure. In his earlier practice DR. EMMET had large experience in tracheotomy, and as long ago as 1856 dispensed with the cannula in several cases, with satisfactory results, keeping the wound open with a thick lead wire passing around the neck. This was bent so as to avoid pressure on the blood-vessels, and through a hole in each end of the wire a silk suture was secured, which had been passed through the skin and edge of the wound in the trachea on each side. In the cases of two children, both of whom survived and attained adult age, he used a long silver wire, passed through the skin and trachea, and so adjusted and twisted sufficiently as to turn the edges of the skin over in close contact with the edge of the opening in the trachea.

DR. EMMET believes it will prove good surgery and a comparatively easy matter to obtain early union between the edges of the skin and the lining membrane of the trachea, and at the same time preserve the necessary opening into the trachea. He advises an oval opening into the trachea, by removing a small portion of tissue on each side, and this can be readily done by the aid of a tenaculum and a pair of curved scissors. A fine needle, about half an inch in length, would answer for the introduction of the interrupted sutures around the opening in the trachea. The first suture should be introduced about the middle of the wound on each side, the others we turn toward each end, using about five to the inch. The puckered line which would necessarily remain at each side, due to the greater size of the opening in the skin than that into the trachea, could be closed with interrupted sutures, which should, preferably, be of silver. The success of the operation must depend on the dexterity of the operator in being able to catch up the skin and subcutaneous tissue so that it will glide over the raw surface and then turn in the edge of the skin in close approximation to the edges of the tracheal mucous membrane.

SULFONAL, THE NEW HYPNOTIC.

When SANCHO PANZA invoked the blessing of Heaven on the man who invented sleep, he struck a responsive chord in every human breast, and next to the drug (as yet undiscovered) which will give a surcease to the thoughts, that which produces refreshing sleep will always be held in highest esteem. Insomnia is truly one of the worst ills on the list and opium, the *magnum donum deorum*, is chiefly great because it is a drowsy drug. But opium does more than to produce sleep and this more makes us chary of its use. The great demand of our modern, high-pressure life is a drug like opium, minus its disturbing effects on the system. The storehouses of nature have been ransacked and the ingenuity of man taxed to to produce it, but with indifferent success. We have chloral hydrate, bromide of potassium, hypnone, paraldehyde, urethan and others, but they are not exactly what we want. The latest addition to the list is sulfonal, which has come to us like a benison, peacefully and unheralded with blazen blare. It comes from Germany, and is vouched for by PROFESSOR KAST, of Freiburg, as a hypnotic without untoward effect, does not disturb digestion, nor cause constipation, and is perfectly harmless. The drug which comes with such a statement challenges close attention. It was first prepared by HOPPE SEYLER'S assistant, BAUMANN, and is a synthetical product. Chemically it is diæthylsulfondimethylmethan. But life is short and the drug will act just as nicely under the name of sulfonal. It occurs in the form of large, flat, colorless crystals, tasteless and odorless. The dose is from fifteen to sixty grains, which may be given either in water or in capsules. A more particularized description

of the drug will shortly be forthcoming, but enough is known to create for it a great demand, and, doubtless, our enterprising pharmacists will soon rise equal to the emergency. We hope soon to receive reports of its action from the busy practitioner, who is ever on the alert for just such articles.

CAUSATION AND PREVENTION OF PNEUMONIA.

A pamphlet on the Causation of Pneumonia, by DR. HENRY B. BAKER, is being distributed by the Michigan State Board of Health. It is an 85-page pamphlet; and is a compilation of statistics, collected by the State Board of Health, relating to pneumonia in Michigan and in other parts of the world. It is a thorough consideration of the subject, and seems to prove that pneumonia is controlled by temperature and humidity of the air. The pneumonia increases after the atmosphere is cold and dry, and decreases after the air is warm and moist. One would suppose that such climatic causes could not be controlled, but DR. BAKER points out how he thinks the disease may be greatly lessened by controlling the temperature and especially by moistening all air which requires to be warmed, in all buildings public and private. During the time of greatest danger from the disease (cold weather), most people spend half their time in buildings where such conditions can be controlled, and DR. BAKER claims that it is the long-continued exposure that causes this disease; so that, if the indoor conditions are properly cared for this disease will be greatly lessened.

Notes.

The Wayne County Medical Society adopted the following preamble and resolutions on the death of DR. E. S. DUNSTER, of the Medical Department of the University of Michigan:

WHEREAS, It has pleased Almighty God to remove from His earthly sphere our worthy companion and professional brother, DR. EDWARD S. DUNSTER, of Ann Arbor, Mich., therefore be it

Resolved, That we as a society tender to his grief-stricken family our heartfelt sympathies.

To the profession before whom he has appeared so eloquent in address, logical in his reasoning, honest in his opinions which he maintained with his utmost power, and, above all, his loyalty to his profession he so dearly loved, and for whose best interests he so long and sedulously labored, we can only say that the loss of one so eminent can illy be told in resolutions or words; in this the heart alone can speak.

In obedience to the Almighty Power that rules the destinies of men, that can build up or cast down, that can give or take away, we bow in humble submission about the bier of our departed friend, fellow-member, and professional brother. Be it further

Resolbed, That our secretary transmit a copy of these resolutions to the press and to the family.

Some time ago we reproduced a statement from a pharmaceutical exchange to the effect that the wild ginseng, as found in China, brought a fabulous price on the market. We were in due time in receipt of numerous inquiries for the address of purchasers, from parties who know where the wild plant grows in abundance. We learn from a book recently noticed in the Lancet, and entitled "Life in Corea," that the wild ginseng of China is a different species than that which grows wild in this country. The plant in this country is the *panax quinquefolium*, the root of which is one of the chief adulterations of senega. The Chinese plant is the *panax ginseng* or *schinseng*. We are glad to have it in our power to make this explanation. No, we do not wish to purchase any of the *panax quinquefolium* at present.

According to the statistics of the Illinois State Board of Health, the doctor's chances of life after he has reached the age of forty are less than those of other citizens of the same age. Previous to that age the percentage of deaths in the profession is comparatively small, but the exposure and irregularity of hours of sleep and meals begin to tell when the halfway post has been reached. Diseases of the respiratory organs, pneumonia and phthisis, are more prolific among them than among other citizens. The sequelæ of rheumatism tell of the increased exposure of the doctor, and death from excessive indulgence in opiates and alcoholics are peculiarly conspicuous from their number.

The four medical colleges heretofore existing in Minnesota have been discontinued and from the ruins has arisen another which has been united with the University of Minnesota as its Medical Department. The faculty has been selected from members of the old faculties resident in St. Paul and Minneapolis, respectively, besides an eastern importation, C. J. BELL, of Johns Hopkins University. The new college is to be a three-year, graded school, and will teach both regular medicine and homœopathy. Time was when such a combination would have resurrected our great ancestor, CAIN. Truly the world moves—whether backward or forward is a question of individual opinion.

SIR MORELL MACKENZIE'S difficulties with the German profession seem to have narrowed themselves down to those he has with PROF. VON BERGMANN, whom he holds responsible for statements and anonymous communications in the public press of Germany. SIR MORELL writes a very pointed letter on the matter to the British Medical Journal, but convincing though it be of the correctness of his position, it seems, at this distance, to have been quite

unnecessary. The man in his position who does his duty, as he sees it, can afford to bear in silence the attacks of envy.

It is said that at the meeting of the American Medical Association twenty-five years ago, the members were given the freedom of the city, and the Mayor gave the police explicit instructions not to be as strict as usual with midnight strollers who seemed to be laboring with some weighty problem, during the week of the meeting. At the late meeting the mayor did not consider such instructions necessary. The quarter of a century just passed has truly been one of great progress. Doctors can now carry pretty good-sized loads without showing the old-time signs.

New York State has abolished the gallows and has substituted electricity as a means of legally killing those who have killed others within her borders. The gallows as an instrument of killing human beings is as much a relic of barbarism as is the killing itself. We are pleased to note the fact that the Empire State has taken this one step forward, but the adaptation of modern science to ancient barbarism is another step backward. In Michigan we believe we can put men to better use than killing them.

We have it on the authority of the Medical Standard that DR. LUSH, of Philadelphia, is talked of as the successor of the late DR. DUNSTER in the chair of Diseases of Women, in the University of Michigan. This would be in the line of the policy which has heretofore prevailed, but it would be a sore disappointment to some who have been fondly hoping that the recent appointment of DR. LYSTER marked a permanent change in this policy.

Virchow has had conferred on him by his Emperor the order of the Red Eagle, of the second class. If he were an American he would reject anything but a first-class eagle. The American eagle is always first class. No second class fowls of this genus are bred in this country. They couldn't find a market here, though they seem to be highly prized in Germany.

DR. A. R. DAVIDSON, one of the editors of the Buffalo Medical and Surgical Journal, died on the 25th ult. DR. DAVIDSON was born in Canada in 1845. His death was caused by pneumonia. He was a gentleman of rare scientific attainments, and of a beautiful character. At the time of his death he was also Professor of Medical Chemistry in the Niagara University.

A hydrocephalic child was born to an ultra-prohibitionist father, who was naturally much concerned and plied the doctor with many inquiries into the cause of the disease. The doctor silenced further questioning by informing the man that the child had inherited the difficulty. "What do you mean?" he asked. "Why," returned the doctor, "it has water on the brain."

The meeting of the Michigan State Medical Society in this city on the 14th and 15th inst., promises to be an affair long to be remembered. The provisions for a good time, scientifically and socially, are very complete. Drs. McGraw and Connor will receive the members and their ladies, and Messrs. Parke, Davis & Co. will give another of their many exhibitions of hospitality to visiting bodies of physicians.

DR. N. D. STEBBINS, for many years a practitioner of this city, but latterly a resident of California, died at Dowagiac in this State, on the night of the 31st ult., at the advanced age of eighty-six. He retired apparently as well as usual, and was found a corpse in the morning. He was a singularly active, energetic man for his years, and departed leaving behind him a friend in every one who had ever known him.

It pays to be a female doctor in England. We do not refer to the gynæcological specialist (although he is generally quite successful in drawing in wealth), but to the doctor whose sex is female. MRS. GARRETT ANDERSON, who leads her English sisters in the matter of practice, is said to realize an income of $50,000 a year.

SHAKESPEARE, the myriad-minded, knew something too of idiosyncrasies. In the Merchant of Venice, for instance, he shows a knowledge of nervous enuresis:

> "Some men there are love not a gaping pig;
> Some that are mad if they behold a cat;
> And others, when the bag-pipe sings a th' nose
> Cannot contain their urine."

The Medico-Legal Journal recalls a doctor who swore positively in a criminal trial, in the State of New York, that he could distinguish and discriminate from the blood-stains on clothing, whether it was human blood or that of a dog!

SIR MORELL MACKENZIE'S services as attendant on the Emperor of Germany has been fixed at $15,000 per quarter, or fraction of a quarter. This falls short of the amount he is said to have realized from his English practice.

Therapeutic Brevities.

TREATMENT OF PROFUSE SWEATING OF THE FEET.—Case recorded by M. LEGOUX. The sweating was abundant and accompanied by such painful symptoms that the patient meditated suicide. Cold foot-baths of walnut leaf water were prescribed for the first two days. Then the feet were painted night and morning with lotion:

Glycerin, 10 grammes,
Liquid perchloride of iron, 30 grammes,
Essence of bergamot, 20 drops.

Almost incredible relief was at once experienced; the sweating gradually disappeared and with it the nauseating odor. In fifteen days both had quite gone.—*Journal de Médecine et de Chirurgie*, March, 1888.

THE TREATMENT OF MENINGITIS IN CHILDREN.—The Journal de Médecine of March 18, 1888, in a detailed description of the treatment of meningitis in children, advises cold applications to the head and counter-irritation, also prompt purgation, if need be, by croton oil. If convulsions occur:

Ether, 20 parts.
Syrup, 30 "
Aquæ, 100 "

of this fifteen minims may be given as needed.

Epileptiform convulsions may be treated by:

Zinc oxide,
Calomel,
Valerian, pulv., ää gr. 8.

In ten powders. One every four hours.

A HYPNOTIC FOR USE IN ALCOHOLISM.—Mann, of Brooklyn, in reporting good results in the treatment of alcoholism, states that he found the following a useful hypnotic. At night two tablespoonfuls were given:

℞ Tr. opii deod.,
Ext. hyoscy. fld., ää ʒ j.
Chloral hydrat.,
Pot. bromid., ää ʒ j.
Tr. capsici, ʒ ss.
Tr. aconit. rad., ♏v.
Aq. menth. pip., q. s. ad. fl. ℥ iv.
M.

Brooklyn Med. Journ., April, 1888.

TREATMENT OF OZŒNA BY INHALATION.—NOQUET prescribes:

℞ Chloral hydrat., gr. ¾,
Acidi boric, gr. $\frac{9}{10}$,
Glycerini pur., ʒ 3½,
Aq. lauro-cerasi, ʒ v,
Aq. destil, ʒ 50.
M.

The spray should be thrown into the posterior nares, and the patient should inspire it through the nostrils.—*Rev. de Therap.—Med. News.*

COLORLESS COLLODIUM SALICYLICUM FOR CORNS AND WARTS.—The mixture of salicylic acid, 30 parts; ext. cannabis indica, 5 parts; collodium flexile, 240 parts, is objectionable because of its staining property. To overcome this, one or two parts of atropine have been substituted for the cannabis indica, to allay the pain and irritation which in some individuals arises from the salicylic acid. Atropine, however, is not the active principle of cannabis.—*Albany Medical Annals.*

ACONITINE AND DIGITALINE.—The Revue (Gén. de Clin. et de Thér. of March 22, 1888 Medical News) gives the following formula for, the use of these alkaloids:

Digitalin, gr. $\frac{1}{6}$,
Sacchar. lact., ʒ 1,
Gummi Arab., gr. 15,
Glycerin. et aq., q. s.

To be made into 100 granules.

PRESCRIPTION FOR HEADACHE.—DUJARDIN-BEAUMETZ recommends the following:

℞ Caffeine, gr. iv.
Salicylate of sodium, gr. iv.
Hydrochlorate of cocaine, gr. iss.
Water, f ℥ ij.
Syrup, f ʒ vss.

M. Take the whole at one dose at the beginning of the attack.

THE TREATMENT OF APHTHÆ.—HIRTZ prescribes the following:

Aquæ destil., parts 8,
Tinct. coca, parts 2,
Sodii salicylat., parts 2.

The mouth should be cleansed with this mixture, on soft cotton, five or six times daily.—*Revue dé Thérapeutique*, March 15, 1888.

SALOL COLLODION FOR FISSURED NIPPLES.—The Gazette de Gynécologie of March 1, 1888, gives the following formula:

Salol,
Ether, ää ʒ 1,
Dissolve and add
Collodion. flex., ʒ 7½.

FOR CRACKED NIPPLES.—The following combinations (Rev. de Thérap., April 15, 1888) have merit:

℞ Salol, ʒ j.
Ether, ʒ j.
Dissolve and mix with elastic collodion, ℥ j.

M. Sig.—For topical use in cracked nipples.

FOR OLD ULCERS.

℞ Lard, ℥ j.
Tannin, ℈ iv.
Acid nitrate of mercury, 12 gtt.

M. Sig.—For application to old ulcers of syphilitic origin.

Medical Progress.

A NOVEL EXTENSION OF THE USES OF COCAINE.*—E. HURRY FENWICK, F. R. C. S., in the British Medical Journal, writes: The use of cocaine has been hitherto restricted to the production of *local* anæsthesia. Its anæsthetic property is too well known and appreciated to tolerate even a passing reference. Other local anæsthetics are, however, making their way to the front, such as kavin, kandol, erythrophlœum (?) (Sassy). It is wise, therefore, to ask ourselves if cocaine is possessed of other powers besides those which render it of topical value. After a large routine experience of the drug, I do not hesitate to answer that question in the affirmative, and to assert that its capabilities have not been justly estimated. I have used it as a therapeutic, diagnostic, and prophylactic agent for three years, and I now wish to place it in these, and I believe novel, aspects before the profession.

My first grasp of its greater capacity was due to an accident. Soon after the introduction of the alkaloid a gentleman came to me from Servia complaining of constant pain in his face, limbs, and urethra. The urethral pain had existed for five years, and was consequent upon an attack of gonorrhœa. The patient was a well-built athletic man of forty. He had had several severe attacks of malaria. His knee-jerks were excessive, and his pupils unequal. He had had a frequent desire to vomit, and complained of pins-and-needles sensations in his limbs, which he described as "feeling like small grains of glass in his muscles." He had lost all sexual power. There was no swaying gait, and no residual urine. Believing that his nervous system was thoroughly demoralized by malaria, and that under these circumstances a urethral granulation might have induced and augmented the continual neuralgia he was suffering from, I proceeded to pass an endoscope and examine his urethra. Before doing so I applied, in the ordinary routine fashion, a few drops of a 20 per-cent. solution of cocaine to the canal. In about 60 seconds he exclaimed that the neuralgia in his face and limbs was leaving him, and in 120 seconds he was completely free from the pain, which he assured me had been so constant a source of anxiety as to cause him to resign an important and lucrative official position. I found a granulation patch (?),† and cauterized it lightly. He rapidly recovered, and, I believe, returned to Servia in anticipation of the then approaching war.

The question that was thus forced upon me was this: Are we able to reduce pain in any part of the body by means of a topical application of cocaine to any absorbent mucous membrane like the urethra? To obtain a perfectly unbiased answer I examined the effects of cocaine upon a large series of decapitated frogs, taking them in spring, summer, autumn, and winter; for, as is well known, their reflex excitabilities vary according to the period of the year. The frogs were decapitated and their toes dipped into a standard solution of sulphuric acid (2 in 1000, Türck). The length of time elapsing before the leg was twitched out of the fluid, and protective movements were made, was noted. Usually this reflex excitability is manifested in .008 to .015 seconds. A few drops of a 20-per-cent. solution of cocaine were now gently thrown into the cloaca so as to inject the bladder and rectum, and the leg was again dipped in the standard solution. The reflex excitability was found to be greatly diminished. Thus the leg was not withdrawn until after 20, 30, 60, or even more seconds. After many control experiments I concluded that cocaine was possessed of considerable reflex inhibitory powers. I now worked with stronger acid solutions, and found that cocaine exerted less and less inhibitory control as the acid solution was increased—*i. e.*, as the stimulus increased. Thus, the leg was almost *immediately* twitched out of a 1-per-cent. solution of sulphuric acid, although a vesico-rectal injection of a 20 per-cent. of cocaine had been administered. With stronger solutions it was evident that cocaine could not prevent the consciousness of the spinal cord nor repress the manifestation of reflex excitability. My conclusions and indications for clinical research were therefore as follows: 1. The application of cocaine temporarily abolishes the consciousness of *weak* stimuli, such as would correspond to slight nerve irritations, neuralgias, etc. 2. The application of cocaine has no power whatever over stronger stimuli, such as would correspond to the pain of carcinoma, inflammation, etc.

I now returned to my clinical field and treated over a hundred cases of neuralgic pains in various parts of the body. In all cases in which the pain was slight and the cause trivial, a freedom from pain was produced in from 30 to 180 seconds by the injection of a few drops of a 20 per cent. solution of cocaine into the urethra. The following are picked illustrations:

Case 1.—A man entered the out-patient department with a wry neck. Although his discomfort was evidently great, yet he suffered but little if he kept his head resting on his right shoulder. Directly he attempted to bring his head to its proper vertical position severe clonic spasms were induced in the muscles of the face and neck, and he shouted with pain. He stated that he had been forced for three months to sleep propped up in bed, because his wry neck prevented him taking rest in the recumbent position. I examined him very carefully to eliminate bone disease, and finally diagnosed a rheumatic affection of the muscles. Without any explanation, I injected into the urethra thirty drops of a 20-per-cent. solution of cocaine and watched the effect upon the wry neck. For 20 seconds there was no change. After 40 seconds the stiffness and the cramp began to leave him. In 60 seconds he was rotating his head excitedly, but with perfect ease and without pain. The relief was complete for some hours. Soda salicylate, potassium iodide, and embrocations relieved him permanently in three or four weeks.

Case 2.—An educated man, aged sixty-eight, came to me complaining of a severe burning and stinging pain along the course of the left second intercostal nerve, passing from spine to sternum and along the left arm. There were scars of a recent herpes zoster in these positions.

*Excerpt from lectures on "The Therapeutical Value of the more recent additions to the Genito-Urinary Pharmacopœia" (The Lancet, Sept., 1887), read before the Medical Society, Jan. 9th, 1888.

† A note of interrogation is used because the old-fashioned endoscope was employed.

A urethral injection of twenty drops of a 20-per-cent. solution of cocaine entirely removed the pain in 30 seconds. Complete relief was thus obtained for some hours, and permanent relief after a fortnight's administration of soda salicylate.

Case 3.—W. S——, aged thirty-eight, married, nine children, came complaing that he had been suffering from (worried by) a burning pain in his glans penis and legs for seven years. He had no syphilis, ataxia, malaria, or vesico-urethral disease. Some relief was obtained from a mixture of potassium bromide and valerian. I then lost sight of him for months. One day he appeared limping, and in evident pain. He stated that for three months the pain in his calves, ankles and insteps had increased. "Sometimes," said he, "it is the left leg, sometimes the right, now it is both, and I can hardly hobble for pain." I injected thirty minims of a 20-per-cent. solution of cocaine into his urethra, and in 90 seconds he was stepping lightly up and down the room. Relief was obtained for some hours, with subsequent recovery.

These cases are certainly striking ones. I give them as uncolored and as bald as possible. I should hardly like to publish them had not similar results been demonstrated to a large number of students and some medical men, and had not each of my professional *confrères* the power of examining the question for himself.

But there are cases in which the pain is due to some direct and severe source of irritation, and in these cocaine fails absolutely. The following are examples:

Case 1.—A patient with carcinoma of cervical glands, and suffering acute pain, experienced no relief from a urethral injection of cocaine.

Case 2.—Pain from the passage of a spiculated renal calculus. Relief was obtained for one minute by means of a cocaine injection; "then an increase (?) of pain" was experienced.

Case 3.—Pain due to carcinoma of the prostate. A cocaine injection into the urethra gave slight relief for a minute, "then increased (?) the pain."

We have therefore a clinical corroboration of the physiological results of a cocaine application. We may formulate the matter thus: If pain in any part of the body be due to a *slight* nerve irritation of an unimportant character, a cocaine injection into the urethra will rapidly relieve it. If, on the contrary, the pain is due to severe nerve irritation, a cocaine injection will not relieve it. These facts open a large field in the differential diagnosis of the cause of pain, as well as the just estimation of the amount of pain experienced by neurotics and others. I have used it largely in the diagnosis of urinary diseases. For instance, in cases of renal pain, if a urethral injection of a 20-per-cent. solution of cocaine immediately relieves a pain in the kidneys, I diagnose a transient or unimportant cause for that pain, such as congestion, uratic urine or gait, colonic pressure, etc. If, however, the renal pain is uninfluenced by such an injection, I give a more guarded prognosis, and this has been several times verified by the subsequent passage of small stone, or, as in one case, by the development of a renal carcinoma. There are also various vesico-urethral diseases in which cocaine thus used has proved of diagnostic value, as in glans pain, urethral pain, suprapubic pain, etc. Lastly, there is every reason to believe that it will prove of value as a prophylactic agent in warding off, by inhibition, the untoward effects of reflex renal flooding after operations upon the bladder and urethra. I have used the drug with this object for a couple of years, and I hope soon to be able to bring forward physiological as well as clinical evidence upon this point.

SULPHONAL, A NEW HYPNOTIC.—The restless life of modern civilization has so far murdered sleep that poppies and mandragora and the drowsy syrups of the East no longer serve us. They have lost their old charm and grow delusive and uncanny. On the one hand, we dare not use ourselves to them lest they make us their slaves for life; on the other, they fail us because they have become feeble and uncertain of effect. Too often these ancient drowsy drugs, whether they bring sleep or not, play sad pranks with our nerves and stomachs on the morrow. Thus it has come to pass that the quest for some new sleeping draught that has no drawbacks, either for to-night or to-morrow, has busied the modern therapeutist alike in field and laboratory. It is not probable that the ideal hypnotic, invariably certain, safe, and prompt alike for the well and the ill, will ever be found. The true nepenthe, like the fountain of youth and the philosopher's stone, exists not in nature but in the imaginations of men. Sleep and forgetfulness for a while, however, we can and often must have. The sleep-inducing properties of the modern, as of the older hypnotics, have, as a rule, been discovered by chance, and usually in the course of experimental studies of the effects of new-found substances upon animals.

Kast, of Freiburg, in the Berliner klinische Wochenschrift of April 16, 1888, in the course of investigations conducted in association with Baumann, in regard to the sulphur combinations in animal tissues, has brought to light a hypnotic of great importance. This substance is an oxidation product of a combination of æthylmercaptans with acetone. It crystallizes in large, colorless, tasteless, and odorless plates, soluble in one hundred parts of water at ordinary temperatures, and readily soluble in alcohol and in mixtures of alcohol and ether. It resists alike the action of acids and alkalies.

Administered to dogs, this substance produced ataxic phenomena, followed by muscular resolution, and finally by light slumber, passing into deep sleep lasting several hours.

Upon waking, the animals were at first unsteady upon their feet, but soon came right again, eating with appetite and showing no trace of disturbance from the drug. Sleep by no means resulted, the effects of the drug being occasionally, and especially in strong animals, limited to the above mentioned motor disturbances. It was then seen that the drug in question possessed powerful physiological activities, affecting primarily the gray matter of the cerebral cortex.

Its effects in healthy human adults, in doses of from 45 to 60 grains, were somewhat analogous, the muscular phenomena being, however, absent, while the tendency to deep and prolonged sleep was under circumstances favorable to repose, very great. Thus the customary short after-dinner nap of surgical convalescents

in a quiet ward, was prolonged into a sleep of several hours, so deep that the patients were aroused with difficulty. The sleep thus induced was followed up by no trace of derangement of the nervous system or digestion.

The hypnotic influence of the preparation in the insomnia of pathological conditions was extensively studied. The sleeplessness of "neurotic" persons, of those suffering from organic disease of the brain, of old age, of the acute febrile affections, of the stadium ultimum of heart disease, of senile dementia attended by active delirium, yielded more or less promptly and completely to the influence of this remarkable drug.

The average single dose in these investigations was 30 grains. In females, as a rule, 15 grains only were required to produce full results; while in robust men as much as 45 grains were frequently given, without unpleasant after-effects. These doses had little or no effect upon the circulation or respiration. Spectroscopic and microscopic investigations showed that the drug exerts no unfavorable influence upon the composition of the blood. It is, also, without unfavorable local action upon the gastro-intestinal mucous membrane. Kast has observed no indication of diminished effect from the continued use of the drug, notwithstanding the fact that some of his patients had taken it regularly for several weeks.

Kast concludes that sulphonal favors the usual periodical need of sleep, and when the normal tendency is lacking, calls it into existence. It is free from the dangers of opium and chloral, much more efficacious than the bromides, and of wider applicability than methylal, acetophenon (hypnone), urethan, paraldehyde, or amylen hydrate.

To this substance, which belongs to the group of the disulphons, Baumann has given the name diæthylsulphondimethylmethan, a designation against the scientific propriety of which nothing can be urged, but which is inconvenient for everyday use in practical medicine. The term "sulphonal," appears to meet the requirements of commerce.

Sulphonal may be administered in powder in water, or mixed with any convenient menstruum, or, being without taste or odor, in milk, soup, or tea. As to its fate in the organism, but little is as yet known; it is eliminated in great part with the urine in the form of other organic sulphur combinations.

We may look for further reports in regard to sulphonal. Already Rabbas, Assistant Physician in the Irrenanstalt in Marburg, has published in the Berliner klinische Wochenschrift of April 23, 1888, the results of his observations in twenty-seven insane patients, to whom the drug was administered on two hundred and twenty-five different occasions. These patients had been under observation for varying periods, and their previous use of various narcotics constituted control experiments which invest his researches with peculiar value. His conclusions are as follows: Sulphonal is a hypnotic which in moderate doses (30 to 45 grains) produces a more certain and better effect than amylen hydrate and paraldehyde in maximum doses. Its results are satisfactory, even in patients accustomed to the use of narcotics. It possesses decided advantages over these drugs in respect of taste and odor. While chloral hydrate induces sleep more rapidly than sulphonal, its effects are decidedly less lasting. Doses of sulphonal of 30 to 45 grains are followed, as a rule, by good results, even in conditions of great excitement. Prolonged use does not necessitate increased doses. Sleep follows usually in half an hour; occasionally, not for an hour or even two hours, and continues without interruption six or eight hours or longer, the effect being gradual and continuous, and the sleep in all respects like normal sleep. Large doses (60 grains) followed, after a short interval, by the usual dose (30 to 45 grains), produce no evil effect. Unpleasant after-effects do not occur. The appetite, digestion, respiration, and heart's action were in no way unfavorably affected.

Rabbas, while strongly advocating the use of sulphonal as a hypnotic, especially in insane patients, ends his report with the remark that it sometimes fails—there is no such thing as an absolutely certain hypnotic.—*Medical News*, May 26, 1898.

TREATMENT OF SLEEPLESSNESS.—1. *Hot Bath*, taken just before settling quietly for the night, is most valuable in producing a dreamless sleep, though this does not usually last more than four hours, and is sometimes followed by a period of great wakefulness, relieved only by a short morning doze. Method of giving the bath most important. Bath room should be at temperature of 65°, and this to be raised during bath to 70°. Patient to be at once stripped, and then the stooped head and face rapidly douched with water at 100° to dilate brain vessels; next whole body, except head and face, to be immersed in bath at 98°, and this temperature rapidly raised to 105°–110°. In about eight to fifteen minutes, when the at first accelerated pulse has fallen to a slow, full, steady and compressible beat, the patient must be slowly raised, closely wrapped in warm blankets (a loose pyjama suit is a good contrivance), and conducted to the bedroom without any haste and at as small personal effort as possible. On reaching the bedroom he will be dry. Let him then at once don his night-clothes and immediately lie down with the head well raised, a hot bottle to the feet, and the body well covered with bedclothes. The bath probably acts by reducing the supply of blood to the whole of the brain, thus decreasing the functional activity equally throughout, and so placing it in the most favorable condition for complete functional rest, to the exclusion of the partial activity of certain centres which would induce dreaming. It has proved most useful for the relief of disturbed sleep in persons who have either ceased to be influenced by ordinary hypnotics, or in whose cases their use is contra-indicated. The bath itself, however, is contra-indicated in extreme anæmia, emaciation, aortic valvular disease, and atheroma.

2. *Massage at bedtime.*—Valuable in organic cardiac mischief, and in the very large number of cases in which functional weakness of the heart and circulation generally is a feature of the nervous debilitated constitution. Two cases of aortic regurgitation mentioned, in which permanent benefit resulted, and one of aortic aneurism where the improvement was only temporary. On conclusion of the kneading the patient must at once compose himself to sleep. Its performance must be rapid, com-

mencing with the abdomen and passing to the back, arms, and legs, with as little exposure of the parts to the outer air as possible, so that a layer of warm air may be maintained between the closely-covered limbs and the bed-clothes. The manipulations should be directed not so much to the evacuation of the lymphatic and venous vessels of the parts dealt with, as to the rapid and sufficient stimulation of the sensory nerves with the dilatation of the arteries over as large an area as possible. This kneading no doubt acts in the same way as tapping the abdominal parietes of a frog, which Goltz showed greatly dilated the abdominal vessels and distended them with blood, whilst it reduced the frequency of the pulse.

3. *Warm Abdominal Compress.*—Take two pieces of twilled calico, half a yard wide and four yards long; roll these up lightly and raise them to a great heat in a closed earthenware vessel in a hot oven. Immerse as much of one as is necessary to cover the abdomen in water, and apply closely to the abdomen, then rapidly and firmly roll the rest of the bandage round the abdomen and loins; take the other hot bandage out of the earthen vessel and wrap it firmly round the first. In this way heat and moisture are kept applied to the abdominal walls, keeping up the free circulation of blood and soothing the nervous system. Schüller put a warm compress on the belly of a rabbit, and having removed the cranial walls, he noticed that an immediate and long-continued contraction of the meningeal vessels, with slowing of the cerebral movements, resulted.

4. *The Wet Pack.*—This is most useful in those cases of erethetic neurasthenia resulting from prolonged over-work, mental distress, morphine habit, chloral drinking, and chronic bhang poisoning. Any immediate beneficial results cannot be expected in these cases. The mechanical stimulus of massage temporarily excites rather than soothes the ill-balanced nervous system. Drugs are contra-indicated and moral suasion is useless.

Should the patient's surface temperature be subnormal (*i. e.*, foot under 90° and palm less than 95°) moderately firm friction of the limbs and trunk should be employed to raise the superficial warmth. The bladder should be evacuated. The patient should leave the pack as soon as the previously retarded circulation begins to be accelerated. The night clothing should be well warmed and put on as quickly as possible.

With all four the recumbent position must be maintained in a quiet, cool, well-ventilated room, the diet must be carefully modified, and daily massage performed.—A. Symons Eccles, M. B., in *Practitioner*, March, 1888.

Unna's Treatment of Acne.—Dr. P. G. Unna writes:—"As every ordinary suppuration must be regarded as due to the invasion of pus microbes, so the clinical picture of acne divides itself into two essentially distinct sections. These are, the process of follicular obstruction and of the formation of comedones, and the process of suppuratiou in the follicle. Comedones are often erroneously separated from acne; their sole cause is in the abnormally firm coherence of the horny layer on portions of the skin provided with lanugo hairs. Whether this change in the horny layer is due to a partial anæmia of the skin, or to the presence of special organisms, is not known. The second part of the process, the suppuration of the follicle, takes place only in those plugged glands within which pus microbes have entered before their closure, and which have been subjected subsequently to irritation (mechanical, eczematous, or from tar, chrysarobin, iodine, or bromine), which has facilitated the intrusion of the pus microbes into the follicular walls. Thus the treatment of acne has to fulfill two chief indications—to loosen the corneous layer and to destroy the microbes. The horny layer can be best removed slowly by means of sulphur and resorcin, while the hyperæmia associated with all efforts at reducing cornification is lessened by the application of oxide of zinc. Resorcin has this advantage over sulphur, that corrosive sublimate, the best agent for destroying micro organisms, can be combined with it; carbolic acid, on the other hand, goes best with sulphur. Twice or thrice a week the whole surface should be gently scraped, the pustules punctured, and the comedones pressed out. The effect of this treatment should be observed at frequent intervals. Every acne patient must wash with soap, and employ water as hot as he can bear, in order to soften the horny layer. Hebra's spirit of soap, marble soap, or sublimate of mercury soap, are still better than common soap. Sensitive persons may dust with oxide of zinc and starch after washing, since this does not occasion any blocking of the follicles. Pastes suit for application at night best; while lotions and spirituous applications can be used in the day time to maintain their effect. As examples of suitable prescriptions the following are given:

Sulphur Paste at night and Resorcin Spirit during the day.

℞ Ung. zinci benzoati, 86·0
Sulphuris precipitati, 10·0
Terræ siliceæ, 4·0
[Vel kaolini], 8·0

M. f. optime terendo pasta.

℞ Resorcini, 2·0-5·0
Glycerini, 1·0
Aq. flor. aurant, 20·0
Spiritus, 80·0

M. Signa. The lotion.

With this either spirit of soap, or over-fatty marble soap, to wash with.

Resorcin Paste at night and Corrosive Spirit during the day.

℞ Ung. zinci benzoati, 80·0
Resorcini purissimi, 10·0
Terræ siliceæ, 10·0
[Vel kaolini], 20·0

M. f. optime terendo pasta.

℞ Hydrarg. perchloridi, 0·05-0·2
Glycerini, 1·0
Aq flor. aurant, 20·0
Spiritus, 80·0

M. Signa. The lotion.

With these either spirit of soap, or over-fatty sublimate soap, to wash.

When the disease has been removed by the treatment indicated, resort must be had to pro-

cedures calculated to obviate recurrences. To this end the continuous employment of a weak resorcin paste, or of a spirit containing 2 per cent. of resorcin and 1 per 1000 of corrosive, or the regular use of sublimate soap, or of marble soap for the face, will be found beneficial. In addition, as in every parasitic affection of the face, any pityriasis capitis must be cured, since in it there is a lurking-place of those germs which are liable to grow in the skin. This simple prophylaxis will prevent many recurrences. Arsenic and ichthyol internally act favorably on the parakeratosis, while keratinized pills, containing one-seventh of a grain of sulphide of calcium, promote the suppuration in the follicle.—*Monatshefte für praktische Dermatologie*, No. 1, 1888.—*Edinburg Med. Jnl.*, May 1888.

THE THERAPY OF GONORRHŒA.—DR. E. FINGER, of Vienna, contributes to the Internationale klinische Rundschau, 1888, No. 19, an article upon "some new antiblenorrhagics," in which he shows apparently that Vienna physicians are a little behind the Western world in the treatment of gonorrhœa. Dr. Finger, like most German physicians, accepts the specific bacterial pathology of this disease, and remarks truly that our therapeutics have not advanced in the same measure as our pathology.

Among what Dr. Finger calls recent internal remedies are two which he thinks are of especial value, viz., sandalwood oil and kava-kava. The former, he finds, possesses the same value as copaiba, but has the advantage of not irritating the stomach. He gives it in five-grain capsules, of which four to six are taken daily. The kava-kava is given in doses of twenty to thirty drops of the fluid extract. The indications for both drugs are the same. They are to be given in acute urethritis, anterior or posterior, and in acute urethro cystitis. Both are contra-indicated in the very severe forms of urethritis, the so-called "phlegmonous gonorrhœa."

With regard to topical measures, Dr. Finger speaks in the highest terms of lanolin ointments. Lanolin has the advantage of being aseptic and antiseptic, and also of being absorbed by the mucous membrane, carrying deep into it, therefore, the active agent with which it is united. The ointment is applied by means of a specially constructed syringe, which consists of a catheter—No. 16 to 18—with a single opening at its vesical end. In this is fitted a piston, the whole holding about one decigramme of ointment. Lanolin ointments are indicated only in the ordinary acute forms of gonorrhœa, and not in the chronic types. The formula given by Finger is as follows:

℞ Nitrat. argenti vel cupri sulph., gm. j.–iij.
Lanolin, gm. xcv.
Olei oliv., gm. v.
Mix.

In obstinate cases the following is recommended:

℞ Potas. iodid., gm. v.
Iodin., gm. j. to iij.
Lanolin, gm. xcv.
Olei oliv., gm. v.
Mix.

Dr. M. A. Castellan (Arch. méd. Belges) has been making some experiments with alkaline injections in gonorrhœa. It has been observed that the gonococcus thrives in acid media, hence he employed eight to ten per cent. solutions bicarbonate of soda three or four times daily. In old cases, in which other remedies failed, the alkaline medication "led to rapid and complete recovery."

Dr. Turpura Impallomenti has been employing one-per-cent. solutions of creasote in decoction of camomile. His results are, that "five out of seven patients were cured in six days."

Dr. Rohe is quoted by the Maryland Medical Journal as recommending ten per cent. dilutions of liquor sodæ chlorinatæ. He finds that the discharge promptly ceases in the majority of cases.

L'Union Medicale, 1886, p. 664, gives a number of formulæ which are highly recommended by "M. Jones" in the Rev. de ther. gen. et therm., 1888, No. 13. These formulæ amount to little more than those of the Lafayette mixture and weak solutions of sulphate of zinc. We are inclined to think that, after all is said, these two preparations will accomplish as much as any of the therapeutic novelties in the vast majority of cases of gonorrhœa.—*Med. Record*, May 26, 1888.

THE RADICAL CURE OF RETROFLEXION BY A NEW METHOD.—Schücking (Centralblatt für Gynäkologie, March 24, 1888) calls attention to the important fact that, in attaching the non-pregnant uterus to the anterior abdominal wall after performing laparotomy, the anatomical relations of the organ become somewhat unnatural, while every method of fixing the uterus by a suture passed through the vaginal vault is open to the dangers of puncturing a coil of intestine, and tearing out of the superficial suture with resulting internal hemorrhage. He accordingly suggests the feasibility of passing a suture from the interior of the uterus outward and downward through the anterior fornix, with the object of causing an adhesion between the anterior surface of the organ and the vesico-uterine pouch of peritoneum, thus producing permanent anteflexion.

The writer operated in two cases according to the following method: The retroverted but movable uterus was anteverted on a sound, the patient being in the lithotomy posture. A specially constructed guarded aneurism needle (similar in principle to Bellocq's canula), threaded at its point with a stout silk ligature, was introduced into the uterine cavity on the left index finger, while with the right finger the anterior vaginal fornix was pushed forcibly upward and backward, so as to bring it in apposition with the fundus uteri. The bladder (previously emptied) was thus pressed forward out of the way, and the safety of any coil of intestine which might have occupied the vesico-uterine pouch, was assured. The needle was then protruded from its canula, and as soon as it had penetrated the anterior uterine wall, as determined by the diminished resistance, the canula was pushed forward over the point, and the handle of the instrument was carried backward until its point was felt by the finger in the anterior fornix, when the needle was again pushed forward through the vesico-uterine

fold and fornix, and the loop of silk was seized with a tenaculum and one end was drawn through into the vagina. The instrument was then withdrawn, leaving the other end of the silk protruding from the os; these were tied tightly, an iodoform tampon was introduced, and special precautions were taken to guard against peritonitis. The suture was removed on the sixth day, support being furnished by vaginal tampons until the ninth day, when these too were discontinued.

Two weeks after the operation in the first case the uterus was found to be retro displaced as before, probably because the suture was removed too soon. In the second case reported the patient was allowed to walk about after ten days, the suture not being removed until the end of the second week. The uterus was found to be sharply anteflexed, and had not changed its position since the operation; the symptoms due to the displacement had entirely vanished.

The writer concludes that the recurrence of the displacement in consequence of the new formation of retro-uterine adhesions is less likely to occur when the uterus is fixed in a position of exaggerated anteflexion, as by his method.—*American Journal of the Medical Sciences*, June, 1888.

THE ADMINISTRATION OF MEDICINE TO CHILDREN.—Jacobi writes as follows on this subject, in the Archives of Pediatrics for May, 1888: In the administration of medicine excitement on the part of the patient must be avoided; the nervous system of infants and children loses its equilibrium very easily. Fear, pain, screaming, and self-defence lead to disturbances of circulation and waste of strength. Preparations for local treatment or the administration of a drug must be made out of sight, and the latter ought not to have an unnecessarily offensive taste. The absence of proper attention to this requirement has been one of the principal commendations of "homœopathy," whatever that may have been the last twenty-five years. Still, the final termination of the case and the welfare of the patient are the main objects in view, and the choice between a badly-tasting medicine and a fine-looking funeral ought not to be difficult. In every case the digestive organs must be treated with proper respect; inanition is easily produced, and vomiting and diarrhœa must be avoided. The most correct indications and most appropriate medicines fail when they disturb digestion; it is useless to lose the patient while his disease is being cured.

The administration of a medicament is not always easily accomplished. Indeed, it is a difficult task sometimes, but one in which the tact or clumsiness of the attendants has ample opportunities to become manifest. For "when two do the same thing, it is by no means the same thing." Always teach a nurse that a child cannot swallow as long as the spoon is between the teeth; that it is advisable to depress the tongue a brief moment, and withdraw the spoon at once, and that now and then a momentary compression of the nose is a good adjuvant. That it is necessary to improve the taste as much as possible need not be repeated. Syrup will turn sour in warm weather, glycerin and saccharin keep; the taste of quinine is corrected by coffee (infusion or syrup), chocolate, and "elixir simplex," a teaspoonful of which, when mixed each time before use, suffices to disguise one decigramme—one and a half grains—of sulphate of quinia. Powders must be thoroughly moistened; unless they be so, the powder adhering to the fauces is apt to produce vomiting. Capsules and wafers are out of the question, because of their sizes; pills, when gelatine-coated, or otherwise pleasant and small, are taken by many. The rectum and nose can be utilized for the purpose of administering medicines in cases of trismus, cicatricial contraction, or obstreperousness. Both of these accessories it may become necessary to resort to for weeks in succession.

TREATMENT OF PRURITUS PUDENDI BY PEPPERMINT WATER.—Routh has used pep permint water as a lotion in pruritus at Charing Cross Hospital, and describes his mode of use and results as follows:

The B. P. preparation of aq. menth. pip. answers well, but is bulky for carrying about, and is incapable of concentration unless rendered alkaline. This is best done by borax, as being in itself soothing and antiseptic. Patients can easily make their own lotion, as required for use, by putting a teaspoonful of borax into a pint of hot water, and adding to it five drops of ol. menth pip., and shaking well, the parts affected to be freely bathed with a soft sponge.

If no cracks or sores are present, this lotion will remove the itching, but if there be eczema, etc., or rawness from scratching, it is inapplicable, olive oil, with five grains of iodoform to the ounce, being then more useful. The greatest and most permanent relief is afforded in the neurosal form, especially in the reflex pruritus which often accompanies pregnancy, and which then may take the place of reflex sickness or vomiting. It is also very useful in the pruritus which occurs in the climacteric, or in elderly women, in whom it may be only part of a general pruritus, and also in those cases of women of all ages, where the urine simultaneously becomes of very low specific gravity, without any evidence of having a gouty or granular kidney as a remote cause.

In pruritus due to pediculi, ascarides, an irritable urethral caruncle, an endocervical polypus, early cancer of the cervix, distention of Bartholini's ducts or glands, the leucorrhœa of vaginitis, endocervicitis, and metritis, or the irritating discharges of advanced carcinoma uteri, or to a gouty or diabetic diathesis, the drug excels all others, cocaine inclusive in affording relief, whilst endeavors are being made to remove the cause.

In two obstinate cases of uncontrollable pruritus of pregnancy, where this remedy gave only temporary relief, the patients were cured by applying iodine liniment to the angry-looking cervex uteri, which method has been used successfully by Dr. John Phillips and others for the similarly severe vomiting of pregnancy. —*British Med. Journ.*, April 14, 1888.

THE SUPERIORITY OF ANTIFEBRINE OVER THE ANTIPYRETICS.—BERNHEIM and SIMON, of the Faculty of Nancy, have communicated to the Revue Médicale de l'Est, the results of

their experiments with antifebrine. They have studied it solely from the point of view of its antithermic action. The daily doses varied between four and thirty grains. The ordinary antithermic dose for an adult is from three to five grains, which may safely be repeated every hour until a sufficient fever-fall is produced. According to their observations shortly after the ingestion of the medicament the temperature begins to fall, and at the end of four hours the minimum thermic point is reached; the temperature then begins to rise, and at the end of three or four hours it has regained its initial degree. These clinical observers have deduced from their experiments the following conclusions· Antifebrine is not alone an analgesic, as has been said, but it is a true antithermic medicament, efficacious, and without danger, (they have, in fact, seen no bad results in two hundred and twenty-three cases in which they have fairly tested it.) Its antipyretic action does not manifest itself by any marked sign, and the thermometer fall does not result from a modification pure and simple in the distribution of the organic temperature.

If, in fact, you study the variations of the rectal temperature and of the peripheral temperatures under antifebrine, you see that the thermic fall is produced at the same time in different points of the cutaneous surface, while the central temperature diminishes consentaneously.

Antifebrine is much superior to all other antithermics known, and to antipyrine in particular; it has over the latter the advantage of a composition that never in the least varies, is of moderate price, and is perfectly tolerated by the digestive passages. Lastly, its greater activity enables us to employ it in doses four times less than antipyrine.—*Boston Med. and Surg. Jnl.* May 24, 1888.

A Test for Intestinal Perforations.—While it is very generally admitted that perforations of the gastro-intestinal tract should be closed by sutures, one need only read the discussions during the past year at the American Surgical Association and the Congress of French Surgeons, as well as the views expressed by recorders of individual examples of shot wounds of the belly, to be convinced that surgeons do not agree as to the propriety of exploratory laparotomy in doubtful cases. This hesitation is due partly to the obscurity of the early symptoms, and partly to the legal complications that may arise, but more to the fact that, up to the present time, there has been no accurate test in diagnosticating the existence of perforations of the gut, without a resort to exploratory laparotomy.

In the Medical News, May 26, may be found an abstract of a remarkable paper read by Senn before the Surgical Section of the American Medical Association at its recent meeting, in which rectal insufflation of hydrogen gas is recommended as an infallible test for intestinal perforations. We had the pleasure of witnessing the author's experiments at Cincinnati, on three dogs, which conclusively proved the truth of his assertions as to the safety and absolute reliability of the measure.

It is scarcely to be expected that every surgeon will have a bag of hydrogen gas ready for emergencies, but there is no reason why every hospital should not be equipped with such a contrivance, to be used not only by its staff, but also to be available to other practitioners whenever it may be required.—*Med. News*, May 26, 1888.

Menthol and Iodoform in Combination for Surgical Use.—At a meeting of the Medicinische Pharmaceutischer Bezirksverein von Berne, Dr. Girard read a paper on the use of menthol in surgical practice. Good results obtained lately by some practitioners from the internal administration of the drug in pulmonary tuberculosis had induced the author to try a mixture of equal parts of menthol and iodoform, in the form of a dry powder, in fourteen cases of scraping out and resection of tuberculous bones and soft parts, the wound being either rubbed or plugged with the powder. In every instance the wound healed more rapidly and kindly, and generally the whole course of the case seemed to be more favorable than in another series of similar cases where iodoform alone was employed. As far as Dr. Girard's personal experience goes, menthol causes but trifling local irritation and pain, while it is said to be the best deodorizer in regard to iodoform.

During a discussion of Dr. Girard's paper, Dr. de Giacomi stated that he had employed a twenty-per-cent. solution of menthol in a case of lupus of the ear with most satisfactory results. On the other hand Dr. de Giacomi was disappointed with the internal administration of menthol in one gramme doses as a remedy for anorexia. The latter observation was endorsed by Dr. Daettwyler, who gave the drug in daily doses varying from three to five grammes in several cases of anorexia, the remedy causing nausea instead of improving appetite. *British Med. Journ.*

Ipecacuanha Spray.—The success attending the use of a certain nostrum as a spray remedy for chronic bronchitis and other diseases of the throat and respiratory organs has lead to attempts to make out its composition. Although some uncertainty was at first produced by conflicting statements as to its physical properties, which favored the suspicion that it was not always uniform in its composition, Dr. Murrell states (Med. Press and Circ., April 21, p. 324) that it was found that if ipecacuanha wine of full strength, or diluted with an equal quantity of water, or an alcoholic preparation of the same strength, be applied by means of a small steam vaporizer or the ordinary hand-ball spray apparatus, it is capable of affording relief to congested and irritated bronchial mucous membranes. Dr. Murrell describes some cases where this ipecacuanha spray was used with great benefit in bronchial catarrh, chronic bronchitis, winter cough, fibroid phthisis and congestion of the vocal cords. The best results were obtained by using the spray for ten minutes three or four times a day; the spray should always be warm and the patient should not go out for some minutes after the inhalation.

Olive Oil in the Treatment of Gallstones.—A correspondent of the Medical News writes that journal as follows:

A few weeks ago I was called to see an officer who was laboring under an attack of hepatic colic, and who is subject to such attacks; remembering my friend, Dr. Streets' report, I gave a tumbler of olive oil, and put the patient under the influence of chloroform at once. When the chloroform passed off, I gave 15 grains of bromide of sodium every three hours, and he slept comfortably, with short intervals of wakefulness for twelve hours. During the day two more doses of olive oil were given, each containing half a tumbler of oil. The oil did not act upon his bowels, and it took a good deal of Hunyadi-Janos water to move them; no gall-stones or other concretions were found in his stools, and he made a rapid recovery.

The point I wish to call attention to is that after the first dose of oil the patient was relieved of pain, and the delirium which had existed passed away. I omitted to state that a hot-water bag was kept over the seat of pain for some hours.

His former attacks were of long duration, and he then found gall-stones in his stools. Does it not seem as if the olive oil has some specific action in these cases?

THE ETHICS OF WASHING OUT THE STOMACH.—Our esteemed contemporary, Gaillard's Medical Journal, says: "We are credibly informed that it is not unusual, in the city of Washington, for young men, before going to dinner parties, in order to better prepare themselves to play the part of gluttons, to wash out their stomachs a short time before the appointed hour." Our contemporary is pained at such popularization of a valuable hygienic and therapevtic measure. We venture, however, to say a word in behalf of these young men. The practice of stomach washing is a legitimate one. There is no reason why a young man should not wash his stomach as well as his face before going out to dinner, and there is no doubt that the youth of Washington do both. It might even be regarded as an act of courtesy to the host to bring to his table a stomach that has been scientifically laundried, and which lies in neat and antiseptic emptiness folded beneath the diaphragm. Perhaps America, with the curse of dyspepsia upon it, needs more such young men as are produced in Washington. Our contempary should not too hastily condemn the fresh enthusiasm for clean mucous membranes that is developing in our nation's capital.—*Med. Record*, May 19, 1888.

A USEFUL DIURETIC.—Dr. Frochard recommends, in the Gazette des Hôpitaux, of March 1st, a powerful diuretic, *orthosyphon stamineus*, in the form of Java tea, in treating gravel and arthritis. He records the following cases: 1. H., aged 60, had passed gravel in his urine for a year. An infusion of Java tea (five grammes to the litre) was prescribed daily. The urine gradually became clear and abundant. 2. F., aged 52, for six months had suffered every three weeks from nephritic colic, followed by the expulsion of calculi. Java tea was prescribed in the same way as in Case 1. In the next two months he had only one attack, and during the five months which had since elapsed he had not suffered at all. 3. M., aged 46, had suffered since 1883 from ascites due to cirrhosis of the liver. For a month he took Java tea, at first five grammes, and then ten grammes in a litre of water. The abdomen diminished in size several centimèters weekly. The drug is perfectly harmless. Dr. Frochard has only used it in the form of Java tea, and pills obtained direct from the importer, M. Périnelle.—*British Med. Journ.*, May 14, 1888.

THE TREATMENT OF DYSMENORRHŒA.—GOUBERT prescribes for young girls:

Iodoform, gr. ½,
Ext. belladonn., gr. ⅙,
Assafœtidæ, gr. 1½.

In pill form.

Beginning six or eight days before the time of menstruation, six pills should be taken daily.

For adult women he prescribes:

Potass. iodid., ʒ 1,
Tinc. croci, ʒ 2,
Tinc. belladonn., ʒ 2,
Syrup. aurant. cort., ad ʒ 6.

Dose a tablespoonful morning and evening, in any convenient liquid, for a week preceding menstruation.—*Gazette de Gynécologie*, March 1, 1888.

THE EMPLOYMENT OF ELECTRICITY IN ATROPHY OF THE MAMMARY GLANDS (Jordanis, Bulletin Gen. d. Therap.)—According to the writer, very satisfactory results may be obtained in those cases where after delivery the mammæ are small and shrunken, and do not secrete milk. In a case reported, the patient had been confined eight days, but the child was not put to the breast, as it was small and not secreting milk. Electricity was applied, and after a few séances the breasts became firm, large and rounded, milk was secreted, and the infant was suckled. The improvement was lasting. The faradic current was used; the positive pole was placed over the breast, but the intensity of the current was not noted. *Edinburgh Med. Jnl.*, May, 1888.

THE MEDICAL TREATMENT OF TYPHLITIS.—BOUCHARD advises morphia to quiet pain, with belladonna plaster locally, and large poultices over the painful part. Hot water enemata twice daily of a quart of water, to which are added sodii borat. grs. 75, and two or three teaspoonfuls of the following mixture: Tinct. benzoin, alcohol camphorat. equal parts. Absolute rest must be enjoined. Purgatives should be used with great caution; magnesia is suggested.

For diet, milk and lime water, in small quantities, to which is added a little yolk of egg—in short, food leaving little residue and not favoring fermentation. If the affection becomes chronic, small blisters are beneficial.—*Pittsburg Med. Review*, April, 1888.

CHLORANODYNE IN TOOTHACHE.—A correspondent of the AGE has found chloranodyne to afford prompt relief in toothache. He has used it in several severe cases by plugging the tooth with cotton saturated with it, and by rubbing it on the gums.

The Medical Age.

Vol. VI. DETROIT, JUNE 25, 1888. No. 12.

Original Articles.

SOME OBSERVATIONS ON THE CONFORMATION OF THE HUMAN CRANIUM.

CHARLS H. MERZ, A. M., M. D., SANDUSKY, O.

The idea of making measurements of the human cranium with the simple hatter's measure, has no doubt occurred to many physicians. As yet very few seem to have availed themselves of this means of obtaining an exact diagram of the shape and size of the skull. Despite the fact that observations in this line are very interesting, the literature on the subject is very meagre. A few years ago DR. DALTON published the results of his investigations in a paper before the New York Academy of Medicine. I desire to offer here the results of observations I have been making, which observations though meagre, may enable us to reach a few definite conclusions.

During fœtal life, the skull is subject to a very rapid increase in size which does not cease until about the age of puberty.

The body, from birth to full growth, elongates three or four times, while the head only doubles its length.

We find the greatest growth taking place during the first two years of life and by the sixth or seventh year the growth of the head is so nearly completed that, DR. HAMMOND says, a hat which will fit a boy at seven years will fit him when a man. It is doubtful if this statement will hold good in every case, but it is undoubtedly true with a great majority of children. So long as the bones which surround the brain are insufficient to envelope it, the growth continues; growth is finally arrested by the pressure of one bone against another and if, during fœtal or early life, there be an unusual increase of bone, there may be pressure enough brought to bear to obliterate sutures and produce deformities. It is probable that many brains are arrested in their growth in this manner and the size of the skull would then become an index of the intellectual power.

Dr. FRANCIS DERCUM, of Philadelphia, in an excellent article on "Epileptic Brains," says: "Two powerful factors have combined to produce this aberrant organ. In the first place, there was in this brain a distinct morphological factor, that is, the line of development instead of following the direction usual in the human brain, was deflected early in the course so as to reproduce, more or less perfectly, structures and conditions found in the apes. * * * * What is the meaning of this thin, large and dilated skull? What is the meaning of this transverse fissuration of the brain? Evidently the two go hand in hand. Evidently this large, excessive brain-mass developed under pressure, and transverse clefts most marked at the two poles of the brain were the natural result."

These premature unions and resulting deformities must certainly exert an influence on the mental faculties.

"Statistics gathered from insane asylums show a greater proportion of such deformities than statistics taken among the people at large." LOMBOREL claims that there is a greater proportion of irregularity and non-development of the skull among criminal classes than among others.

All skulls are asymmetrical. Occasionally one will be found which appears to be nearly a perfect oval, but measurement will show variations in the contour. Among the one hundred and more heads examined, no skull was found which presented an exact due proportion of the several parts of the circumference to each other, neither does there exist a *respective* symmetry, since the opposite sides of the skull differ in various degrees from each other.

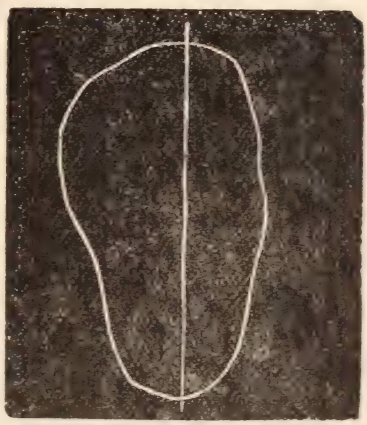

FIG. 1.

The longitudinal and transverse diameters present a wide difference, as will appear from figs. 1 and 2, those having been selected as the ones showing the greatest variance. For convenience of classification, the heads are divided

into long and round. Measured upon a standard approximating that of Dr. DALTON'S which makes 100 the standard width and 125 the standard length. All heads between 120 and 130 in length are medium; all above 130 are

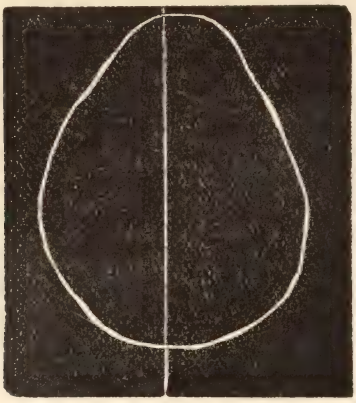

FIG. 2.

long, and below 120 round. Careful measurements show that there a greater number of long heads than round, the proportion being three to one. In the long heads examined, the forehead and occiput were usually well developed, while there was a sinking in at the temples; in one case this depression amounted to ⅓ the transverse diameter, while in 85 per cent. of the number there was some depression over the temporal region.

In one case an opportunity occurred in which an outline could be compared with one taken

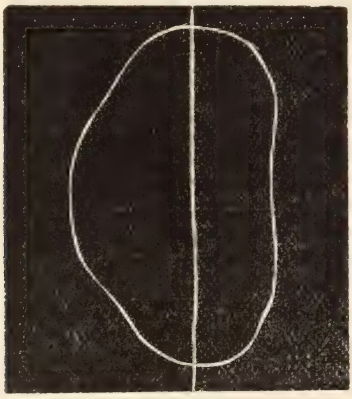

FIG. 3.

on same head seven years before. There was found to be a very slight increase in length, but a decided increase in the degree of depression over the temporal region. The head had preserved the same general contour, excepting that the depression mentioned served to make the forehead more prominent and round. It is a question whether the head enlarges or changes much during adult life. The thickness of hair might readily account for the slight variations required in the sizes of hats.

In some cases the skull was abnormally small, microcephalic; in others unusually large, while in a few cases it was found to be plagiocephalic or twisted. Fig. 3 is a good illustration of such a head.

That a direct relation exists between the size and shape of the skull, and the intellectual power is further proven by observations upon the facial angle. The size and weight of the brain may be said to increase with the angle of the face, an angle made by a base line drawn from the floor of the nostrils to the base of the occipital bone and a face line drawn from the anterior margin of the upper jaw to the forehead. The circumference of the skull taken during these observations increases with the facial angle. This would seem to furnish additional proof that

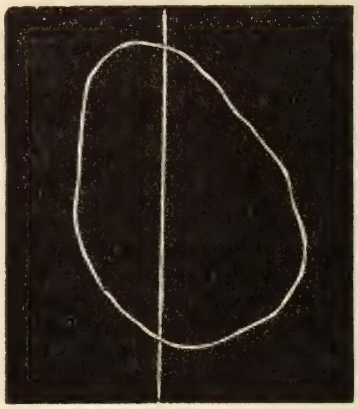

FIG. 4.

the conformation of the skull taken on a plane just above the eyes is something of an index to the mental abilities of the person.

The profile view of the head of the idiot shows by the size and shape of the cranium or skull that an arrest of development has wrought changes which correspond to his mental abilities. In many cases, the condition upon which idiocy depends is the small size of the brain as a whole. Though the special senses in these cases are often freely developed, the intellect is generally of a very low order.

LANDOLT, of Paris, has called attention to the relation existing between the conformation of the cranium and the condition of the eyesight. Seemingly but very little attention has been given to this point. In many cases it will be evident to the observer that flatness of the forehead and bridge of the nose is accompanied by hypermetropia. No doubt if careful observations are made, this statement will find verification from many physicians. In ammetropia, when congenital, it will often be found that there is an unequal development of the

two sides of the forehead. LANDOLT claims that the side of the forehead is more developed which corresponds to the eye with the stronger refraction, while the half corresponding to the eye with the lesser refraction is usually flatter and smaller. In twenty cases examined, this state was found to be true. Fig. 4 illustrates this point. The subject, a gentleman, æt. 60, upon examination proved to have myopic astigmatism of the right eye while the left eye was also myopic. The conformation of the head shows a decided flattening on the left side.

Fig. 5 represents the shape of the head of a

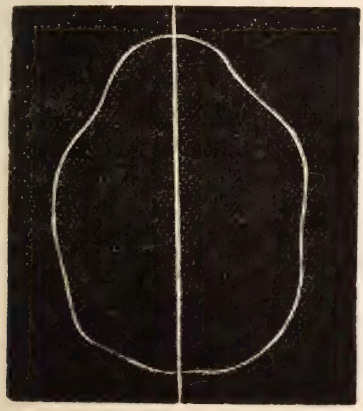

FIG. 5.

child, æt. 12. Both eyes were astygmatic and myopic, the right being a trifle more myopic than the left.

Of course it is the anterior portion of the head which is supposed to have a predominating influence upon the development of the eyes. In many cases one half of the anterior portion of the head will be found more fully developed in which no inequality of vision exists. As the difference in refraction is often due more to the length of the eyeball than to the differences of the refracting power, and as this condition of the eyeball is frequently congenital, it would be reasonable to infer that the conformation of the anterior portion of the head bears a direct relation to the eyesight.

Careful measurements have been made to determine which side of the head is more fully developed. Arguing from the standpoint that the right side is more fully developed than the left and that muscular strength is usually in excess on that side, the left side of the head should present the largest contour. This proves to be the case, the left side being larger than the right in the proportion of 3 to 1. Unequal cerebral and muscular development seem to bear a relation also. Dealers in gloves, whose business makes it necessary for them to make frequent measurements of the hands, state that the right hand is usually a little larger than the left and that if it be desired to furnish a pair of gloves that are a snug fit, the measure is taken on the left hand, while, if to the contrary, a loose fit is sought, the measurement is

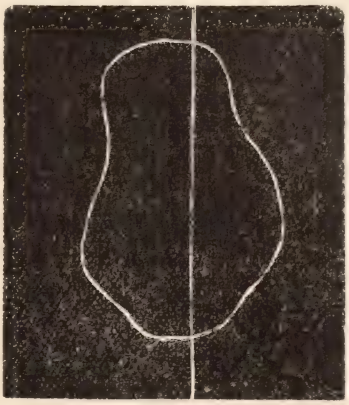

FIG. 5.

made on the right hand. One more figure is added to show the extreme irregularity of contour which the head may present. If in examining the head, the occiput be found flattened on one side, the forehead will usually be found flattened on the opposite side, just as if pressure had been applied to the two "corners" of the head diagonally opposite each other.

In all the illustrations, the forehead is at the upper part and the occiput at the bottom. The straight line represents the center of the instrument.

From the earliest times the popular idea has been that superior mental abilities accompany great size of the head. The writings of ancient and modern times attest this fact. Yet, occasionally striking exceptions are found.

In estimating the intellectual value of an individual from such measurements, we must take into account the relative proportions of various regions of the cranium, frontal and occipital. The generally-accepted rule is that a cranium which does not measure 19.6 inches in circumference, indicates that the owner is a man of only ordinary ability, while a cranium which measures 22.8 inches indicates that the owner possesses unusual mental ability. Of course we must not lose sight of the several factors which go to form a basis of judgment; all must be considered in forming an opinion from the measurements of the skull.

Summary.—These irregularities of contour and developement occur, for the most part, during fœtal life, at birth, or during the years prior to the age of puberty. Many of the heads that were moulded during parturition regain their former shape, while in others, the irregularity of the contour remains permanently.

The size and shape of the skull are to some extent an index to the intellectual capacities of the individual.

No skull is perfectly symmetrical, as the two sides always differ from each other.

In the heads examined, the long skull outnumbered the wide skull.

The shape of the anterior portion of the skull to some degree determines the power of the eyesight, more especially in cases in which the refraction is different in each eye.

In nearly all of the heads examined, the entire left side of the head was larger than the right.

The main points of interest in connection with this subject have been brought to the attention of the physician. It is hoped that further observations will be made in this direction and that our knowledge of the conformation of the cranium may be so perfected as to be of value as an aid to diagnosis.

Injuries to the child during birth are of frequent occurrence. It has been claimed by some writers that depression of the bones of the fœtal skull are always accompanied by fracture. These depressions are frequently seen, but it is difficult to say how many of them remain permanently. There is no doubt but that the fœtal head can endure great pressure without injury if the compressing force be applied to a large area. Dr. Parvin (*Med. News*, Nov., 1887), in discussing the obstetrical aspects of idiocy, says that in a large number of cases of idiocy, the subjects were born after difficult labors, these being tedious, and he held that if a neurotic tendency was present, the tedious labor and suspended animation might determine the catastrophe where otherwise all might have gone well.

Ages.	19	20	21	22	23	24	25 and upwards
Class A. 'High-Honor' Men.	241.9	244.2	241.0	248.1	244.6	245.8	248.9
Number of Measurements.	17	54	52	50	27	25	33 — 258
Class B. The Remaining 'Honor' Men.	237.1	237.9	236.4	241.7	239.0	251.2	239.1
Number of Measurements.	70	149	117	73	33	14	20 — 476
Class C. 'Poll' Men.	229.1	235.1	240.2	240.0	235.0	244.4	243.5
Number of Observations.	59	102	79	66	23	13	26 — 301

Dr. Mitchell (*Med. Times*, 1862–63, believes in a connection between idiocy and difficult labor. In the same paper some interesting facts in this connection are to be found in the measurements recently made by Mr. Francis Galton of the heads of Cambridge (England) students. What is called a "head-product" may be fairly regarded as representing average brain-volumes. It is obtained by multiplying the maximum length of the head by its maximum breadth and its maximum height above a certain plane. The result represents the contents of a rectangular box that would just fit over the head. This is only rudely proportional to the brain-mass in individuals, but would be closely proportional to it in the average of many cases. Below is the table:

It would be fair to presume from these figures that men who obtain high honors have considerably larger brains than those who do not.—*Science*, June, 1888.

TREATMENT OF INFLAMMATIONS OF THE LIVER.*

In the last lecture I included inflammation of the liver in the group of engorgements of this organ. It is the treatment of these inflammations which I intend to set forth to-day. As I desire to confine myself within the limits indicated by the title which I have given to this course (Clinical Therapeutics), I shall occupy your time only with those affections which we meet in our wards, and with diseases of which you can watch the progress, and judge the effects of the treatment. Therefore, I shall not attempt a complete study of hepatitis, properly so-called, a disease which is not observed in our country, and to which has been given the name of the hepatitis of warm climates. You will find, moreover, in the remarkable works of our confreres of the marine service, and in the writings of English physicians, who, practicing in the colonies and in particular in India, have very frequent opportunities for observing this kind of hepatitis, precious and useful data on this subject. What we find in our hospital service, under our climate, is the result of this hepatitis contracted in the tropics, a suppurative hepatitis, which produces voluminous abscesses of the liver, and at this moment, in this very hospital, you can see in the wards of my colleague and friend Perier a fine instance of these abscesses brought on by living in a hot climate.†

*From advance sheets of Diseases of the Liver, by Dr. Dujardin-Beaumetz. Translated by E. P. Hurd, M. D. Physicians' Leisure Library. Geo. S. Davis, publisher, Detroit, Michigan.

†The hepatitis of warm countries, when it is not due to traumatism and to an alteration of the digestive passages, may be determined by rapid chilling of the body while

But before taking up the treatment of hepatic abscesses, allow me a short digression concerning their origin. I have just told you that these purulent collections are the consequence of suppurative hepatitis; I thus touch upon an important question in their pathogeny. In fact, in the opinion of a great number of observers, abscesses of the liver do not result from hepatitis, but from dysentery; the ulcerations of the intestines determine the passage of septic matters into the portal circulation, and the transference of these matters into the substance of the liver, causing abscesses more or less voluminous; I, myself, saw in this very city, while clinical chief under BEHIER, an absecss consecutive to dysentery. The fact, then, is settled; but must we therefrom conclude that all the hepatic abscesses of warm countries have this intestinal origin? By no means. MURCHISON maintains that generally these abscesses are the consequence of the inflammation, and that if dysentery exists, it is only a coincidence—a coincidence, by the way, which is very frequent, as dysentery and hepatic inflammation are two affections which are endemic in the tropical zone.

Whether they result from an hepatic inflammation or are due to dysentery, abscesses of the liver present themselves under the following form: They are fluctuating tumors, sometimes of enormous size, which unequally augment the volume of the gland; these tumors are generally slow, are accompanied, like every suppurating swelling, with accessions of intermittent or remittent fevers; sometimes, however, the fever is wanting. These abscesses, if left to themselves, may open externally into the intestine or into the peritoneum, or they may dissect for themselves a passage through the lungs and pleura.

What treatment is advisable in such cases? We find ourselves in the presence of opinions which are diametrically opposite: BUDD maintains that it is best not to interfere; MURRAY, MURCHISON, CAMERON, MARTIN, and others urge the most prompt possible general interference. This latter practice is the one you should follow, for not to render surgical aid is to greatly increase the chances of death; and this is not, gentlemen, a haphazard assertion, but one based on trustworthy statistics, which show that out of 120 cases of abscess of the liver, left without operation, there is a mortality of 80 per cent., while by suitable surgical intervention this mortality is reduced to 32 per cent.*

Moreover, gentlemen, you know that all surgical operations on the liver are made at the present day with extreme facility, and with little or no danger. Thanks to the aspirators of DIEULAFOY and POTIN, we can now puncture the hepatic gland with safety, and if it happens for any reason that we do not hit the fluctuating sac, no harm results from the operation.

Lavigerie has made experiments on animals to judge of the innocuousness of punctures of the liver. He practised in dogs fine exploratory punctures; he never found any lesion of the hepatic parenchyma.

* The Medico-Chirurgical Society of Alexandria in Egypt has given the most complete statistics concerning abscesses of the liver. Out of 123 cases of hepatic suppurations, 80 per cent. of those on whom no operation was performed, died, while 32 per cent. that received surgical help got well. In cases of large abscesses, there was a mortality of 88 per cent. among those where there was no operation, to offset 68 per cent. of recoveries where surgical aid was early resorted to. —(Bulletin de la Soc. Med-Chir. d' Alexandrie, 1867.)

sweating, and sudden suppression of perspiration by excessive drinking of cold water, etc.

This disease frequent in India and in the tropical countries generally, is not equally grave in the French colonies; hence it is quite rare at Cayenne, while frequent and very fatal at Martinique and Senegal.

As Dutroulean remarks, the endemic hepatitis of hot climates passes through different stages which have their distinct characters: to the three anatomical characters, congestion, inflammation, suppuration, correspond certain symptoms which give to the disease a special physiognomy.

To the form which is the most mild, has been sometimes given the name of the dominant symptom "*liver ache*" (*point de coté*); the denominations acute and chronic hepatitis indicate the disease arrived at the stage of phlegmasia corresponding to these two forms; abscess of the liver indicates the disease gone on to suppuration.

The pain in the side corresponds to active hyperæmia. Sometimes suddenly, after fatigues or excess, the patient is taken with an excruciating pain in the right side, exasperated by pressure and strong inspirations. This pain by degrees becomes less, then disappears, to return after the least fatigue or excess. Sometimes the disease is confined to this one symptom, and the patient gets well; if it continues its progress, it soon goes on to the second and third stages.

Habitually, the hepatitis begins by an accession of fever with a chill, heat, and sweats; then supervenes an excruciating, lancinating pain, which obliges the patient to writhe and draw himself up in his bed; at the same time there is a considerable difficulty of breathing which auscultation does not sufficiently explain.

When the crisis is passed, the patient still experiences the pain, which is less intense, and which almost always corresponds to an inflamed point in the liver. Dutroulean attaches a great importance in diagnosis to a sympathetic pain which the patient sometimes experiences in the right shoulder, and which indicates an inflammation of the convex surface of the organ.

If the patient is to get well, the pain little by little disappears leaving only a little soreness behind. If the diseases passes to the chronic stage, the pain becomes intermittent, lancinating, while the fever becomes high if the hepatitis goes on to suppuration.

Jaundice does not always exist after the crises; sometimes there is a straw yellow color of the skin, a simple icteric pallor, with slight discoloration of the sclerotics; the urine is red, and scanty, and does hot contain the coloring matters of the bile, except when the icterus is intense.

When the hepatitis goes on to suppuration, the liver becomes tumefied and protuberant, and sometimes a bulging is detected at the point where the abscess is seated.

Abscesses of the liver are superficial or deep, are oftener seated in the right lobe than in the left (in 122 out of 136 cases). They differ from metastatic or pyæmic abscesses which have a brown color, are small, situated at the surface, and do not possess a pyogenic membrane. The abscesses of hepatitis are generally single. Out of 66 cases Dutroulean found 41 in which there was but one abscess; 16 in which there were 2; 5 in which there were 3. Lastly, out of these 66 cases there were 56 large abscesses, *i. e.*, the size of an orange at least, and 10 small ones.

The pus of recent abscesses is yellow, creamy, and inodorous, that of old abscesses is brown, the color of wine dregs, sometimes contains blood or the debris of the organ; takes on an ammoniacal, sometimes putrid odor.

When surgical interference is not resorted to the abscess, if not too large, may get well by absorption; else it increases in size from day to day, and the patient, by reason of the progress of the disease, falls into a profound adynamia, and dies of exhaustion. Under other circumstances, the pus dissects for itself a passage externally, or into the neighboring organs. If there are peritoneal adhesions, it may burrow its way through the abdominal walls; in other cases it bursts into the peritoneal cavity, and causes a rapidly fatal peritonitis. If the abscess opens into the pericardium death does not long delay, but if it opens into the bronchi, the stomach or the colon, recovery may sometimes takes place. Murchison relates such a case of recovery in a physician whose abscess opened into the bronchi.

The Medico-Chirurgical Society of Alexandria has reproduced these experiments on cattle, horses and dogs, and has obtained similar results.

If we trust to the reports of the English physicians who practise in India, and make almost daily use of the aspirator as they are able to render assistance at the onset of the abscess, we cannot help believing that these punctures always relieve the patient, even when they do not bring away pus, by producing a local letting of blood in the inflamed gland.

However this may be, we ought always, before resorting to a more active treatment, to practise these aspiratory punctures. In the the hepatic abscesses of warm countries, this simple operation may suffice, but ordinarily this is not a curative method, and it is necessary to have recourse to other processes in order to give a free issue to the pus, and to wash out the sac by antiseptic syringings.

These processes which pertain to the domain of surgery, are some of them slow, others rapid. I will give you a more complete account of them when I come to the treatment of hydatid cysts, and will only briefly allude to them here.

The slow processes are recommended principally by GRAVES and RECAMIER. GRAVES has advised an operation similar to that proposed by BEGIN in the treatment of hepatic cysts; *i. e.* he counsels to incise the abdominal walls down as far as the peritoneum, then to wait till nature makes the opening through that membrane. RECAMIER prefers the application of caustics, and the process is the same as that described for the opening of hydatid cysts. It is the process which PERIER employed in the case of which I have before spoken.

Recamier places over the spot where the tumor points, from 3 to 5 grains of caustic potash; he thus obtains an eschar of 3 or 4 c. m. in extent. Then when this is detached, he puts in the wound a new piece of caustic potash, and repeats the operation till the abscess opens.

Graves incises the soft parts to within 3 or 4 m. m. of the abscess, fills the wound with charpie, and waits till the suppurative inflammation has brought about the opening of the sac.

Begin cuts down to the peritoneum and waits till by the progress of the inflammation the abscess bursts outwardly.

But the rapid processes are preferred to-day, and authorities seem to attach less importance than formerly to the formation of adhesions, relying on the fact that in the abscesses of hot countries the hepatitis will have determined at the very onset of the affection the adhesions which are sought for; therefore the method of CAMBRAY seems to have prevailed, who advises to enter the sac at once, and by a direct incision. This is also the practice of DOUTROULEAN, who first makes an aspiratory puncture into the sac, then by means of the cannula left in place, and used as a grooved director, he incises the tissues, and at one sweep makes a large opening into the abscess.

This practice has since been perfected, and with antiseptic precautions and Lister's dressings, the custom is now to open these abscesses altogether with the bistoury. This is the mode of treatment successfully employed and heralded by a physician at Shang Haï, LOUIS STROMEYER LITTLE.*

With regard to a choice between the methods, much must depend upon circumstances. When you have to do with an immense abscess, causing a marked bulging of the hepatic region, and by its very size producing profound disorders, you will employ the rapid processes, that of CAMBRAY, or of DOUTROULEAN modified by LITTLE. When, on the other hand, the abscess is of small size, and the operation less urgent, you may have recourse to the method of RECAMIER, a process which is not so long as one would think, as with repeated applications of caustics it is possible for you in two days easily to reach the liver. You can act even more promptly by resorting, not to caustics, but to the Paquelin cautery. You will thus be renewing the practice which from time immemorial the negro empirics have followed in the treatment of abscesses of the liver in their countrymen.

They pass back and forth over a point of the hepatic region a red-hot iron, then at the end of several days they make a free opening with the knife. According to BORDIER, the negro operators of Senegal base their procedure on the fact which they have observed (and which is, moreover, perfectly exact), that a burn made on a point of the abdominal wall determines an adhesive inflammation of the peritoneum which corresponds to this point.†

Now that surgeons, thanks to the antiseptic treatment, boldly enter the abdominal cavity, the rapid processes are coming more and more into vogue, and have pretty generally superceded the slow methods. An abscess of the liver is considered just like a collection of pus elsewhere, to be freely opened at whatever depth it exists.

Whether you have recourse to the slow or rapid process, when once the sac is open, care must be taken to make antiseptic lavages with solutions of chloral or of boric or phenic acids.

After the operation, there are two untoward accidents which you may have to meet; first, hemorrhages, and you can understand the reason of this when you think of the active circulation in the liver; the biliary fistulæ. The hemorrhages are generally venous, and cold injections of perchloride of iron will be likely to control them. The other accident, the creation of a biliary fistula, is not so amenable to treatment, and sometimes patients will carry all their life long a fistulous tract which gives issue to a more or less free flow of bile.

* Little's success under rigid antisepsis has been complete. The operation is done under the spray, with a long bistoury. To facilitate the issue of pus, a pair of dressing-case forceps is introduced and the blades forcibly separated; then the abscess is washed out with a 1-30 carbolic solution, and a large drainage tube inserted. The whole is covered with Lister's dressing. (Bull. de Thérap., xxcix, p. 408).

† Bordier, Treatment of Abscess of the Liver in Senegal. (Jour. de Thérap., 1880).

Thus far I have given exclusive attention to the treatment of hepatitis, and have shown you how rare this affection is in our climate; this is unfortunately not the case with another form of inflammation of the hepatic gland, intestinal hepatitis, which you will frequently observe in our wards, and which is known under the name of *cirrhosis*.

To any one who should deny the important advances which histology has made in the study of diseases, I know of no more convincing instance of such progress than this subject of cirrhosis. At the commencement of my studies, thirty years ago, we were taught with reference to cirrhosis the doctrine of LAENNEC, *i. e.* the existence of two substances in the liver, a yellow substance and a red substance; the predominance of the first over the second constituting cirrhosis.*

Since then, thanks to the progress of histology, we have learned that there are varieties of cirrhosis which are all characterized by a chronic inflammation, having for its origin the different constituent elements of the liver.

First, we have the common cirrhosis, dependent on inflammation and hyperplasia of the capsule of GLISSON which surrounds the veins, and this is the only kind of which I shall speak here. Then we have a chronic inflammation having for its origin the biliary canaliculi, the hypertrophic cirrhosis of which I spoke in my last lecture. The lymphatics, as HAYEM has shown, may also be the point of departure of a chronic inflammation which is observed in individuals affected with syphilis. This is syphilitic cirrhosis: lastly, according to SALAMON the arterial system may, in its turn, be the origin of this chronic inflammation, and certain forms of hepatic cirrhosis may be attributed to that arterio-sclerosis of which interstitial nephritis, as we shall see later, is one of the most common symptoms.

As you see, gentlemen, sclerous inflammation of the liver may have for its origin the veins, the lymphatics, and the bile-ducts, and to each one of these kinds corresponds a special cirrhosis; if I add that these lesions may be combined, and constitute mixed forms, you will agree with me that a great deal has been accomplished the last fifty years in elucidating the pathology of the cirrhoses.

Common cirrhosis, which is still called atrophic cirrhosis, is constituted, as I have just told you, by hyperplasia of the connective tissue frame-work of the liver, which chokes the hepatic cells and compresses the capillary venous net work; we know also that this interstitial inflammation has for its starting point the ramifications of the portal vein, and it is in the cellular tissue which surrounds these veins, *i. e.*, in Kiernan's interlobular space, that the inflammatory processes begin.

This is of great importance from the point of view of the pathogeny of cirrhosis; it explains the well-known action of the alcohols on the development of this affection, a cause which is so common that in England the name of "gin-drinking liver" is given to this disease. The alcohol absorbed from the surface of the digestive tube by the nervous system, passes to the liver, but its presence in the ramifications of the portal vein determines a periphlebitis of special nature which propagates itself to the connective tissue bind-web of the liver and determines there that particular hyperplasia which characterizes cirrhosis.

Inasmuch as drinking habits have been for several years on the increase (and here in Paris as well as other parts of the world); moreover, as in consequence of the high price of wine and the ravages of the phylloxera the alcohols of vinous origin are becoming so rare that only the rich can afford them, so that the fiery liquors are chiefly in demand, and the poorer quality of distilled spirits are sold in the dram shops and consumed by the masses, it is easy to understand the constantly increasing number of cases of alcoholic cirrhosis.

These two conditions, the growing abuse of alcoholic stimulants and the use of impure spirits, sufficiently explain the increasing frequency of cirrhosis, and we have always in our wards one or two typical cases of this affection.

However, in the experiments which I undertook with ANDIGE, on swine, which were subjected to slow poisoning by daily doses of different kinds of alcohols, we did not succeed, after three years' experimentation, in engendering interstitial hepatitis.*

It will not do to conclude from the negative result of these experiments that alcohol is not influential in the production of cirrhosis, for

*Laënnec was the first to describe cirrhosis as a special disease; he gave it the name of *cirrhus* (red), and considered the granulations seen on sections of the liver as productions of a parasitic nature similar to tubercles, and called these granulations *cirrhoses*. ANDRAL taught the existence of two substances in the liver, and while one, the red vascular substance, undergoes atrophy, the yellow glandular substance hypertrophies. BECQUEREL, in 1840, defended from an anatomo-pathological point of view, the correctness of this division of the liver into two substances. GUBLER, in 1853, called attention to the researches made by KIERNAN in England and HALLMANN in Prussia, and was the first to point out the true nature of cirrhosis.

Lastly, we are especially indebted to CHARCOT, who in these later years has insisted on the importance of periphlebitis as point of departure of interstitial hepatitis.

*In our experimental researches on chronic alcoholism practiced for three years on a number of hogs, we noted the following symptoms: During life, some of the animals under experimentation presented a yellowish coloration of the conjunctivæ, and their urine became icteric. This icterus always showed itself when we exceeded the quantity of two grains per kilogram of the animal's weight, and the symptoms were more marked with alcohols of bad quality (the higher atomic alcohols) than with ethylic alcohol. At the autopsy we found nothing but congestion of the liver; in certain cases the hepatic parenchyma was friable, but there was neither interstitial hepatitis nor ascites.

PROF. CORNIL who made the histological examination of the liver of the poisoned animals, indeed, noted an extraordinary amount of connective tissue substance, but this is, he says, a normal condition in the hog. (See BEAUMETZ and ANDIGE, "Experiments in Chronic Alcohol Poisoning" translation of E. P. Hurd) in *Therapeutic Gazette* for July and August, 1884.)

the anatomical arrangement of the liver in swine explains the absence of cirrhosis in the particular cases referred to, the liver in hogs being usually supplied with connective tissue reticulum which keeps the lobules apart and prevents their compression.

You all know the train of symptoms which cirrhotic patients present when they enter the hospital; ascites more or less developed, abundant serous diarrhœa, hemorrhoids, enlargement of the abdominal veins, advanced cachexia, profound emaciation, scanty and high-colored urine, liver if anything reduced in size, spleen, however, somewhat tumefied—such are the morbid phenomena observed in such cases, all resulting from the mechanical disturbance in the circulation of the portal vein. It is this mechanical disturbance, having its origin in the intra-hepatic reticulum, which has for its consequence stasis of blood in the portal vein and mesenteric veins, the latter entailing effusion of serum into the abdominal cavity, preventing absorption from the surface of the intestinal mucosa, and thus giving rise to serous diarrhœa and hemorrhoids. It is to overcome this obstacle that the spleen augments in size, and it is to establish a supplementary circulation that the subcutaneous abdominal circulation undergoes increased development.

But what we have just been considering is but the ultimate stage of the disease; there is another stage which precedes the organization of the connective web work, a congestive period during which the patient does not generally demand medical help. He in fact does not present himself at the hospital till his disease has produced ascites, and only applies for treatment when it is too late for anything but palliation.

In these sclerous, interstitial, inflammations, we can only influence the congestive element which precedes the connective tissue hyperplasia. What I say to you of the liver, I may also say of the interstitial nephritis, of sclerous myelitis, of which the inflammatory process is the same. When once the proliferation of connective tissue cells is a settled fact, we can not by any therapeutic means destroy these organized products, or hope to restore the hepatic cells, when we have to do with the liver, the malphigian bodies, when we have to do with the kidney, or the nerve tubes when it is a case of interstitial myelitis.

We can then hope to render efficacious service only in the first period of the disease characterized by congestive symptoms; hence, in the case of every person addicted to alcoholic abuses, you should give your attention even to the minor symptoms referable to the liver, and combat them by the best means available for diminishing hyperæmia of the liver, *i. e.*, revulsives, cholagogues, milk diet, and absolute abstinence from alcoholic beverages. By these means you will sometimes obtain really marvelous results, and one of the most curious cases which I have witnessed was that of a patient who was sent to me by DR. TOURANGIN, who presented all the symptoms of advanced cirrhosis; he is to-day quite well, and has been so for more than two years *

You will place, then, at the head of your treatment, milk diet, which is capable of itself of bringing about an amelioration equivalent to a cure; and you may have seen by recent discussions at the Medical Society of the Hospitals that such cases are not as rare as one would think.

You may add a therapeutic agent which I have tried, and which has given me good results; I refer to the hippurate of lime, which you may prescribe according to the following formula:

℞ Pure hippuric acid, 25 grains.
Milk of lime (neutralized), q.s.
Syrup, 500 grains.
Essence of anise (to flavor), q. s.
M. Sig.—Four to six teaspoonfuls a day.

But it will not do to place more than a moderate confidence in this medicament, and you will be often fated to see your patient improve in health only to resume their alcoholic excesses, and succumb to the progress of their cirrhosis.

Do you ask whether when cirrhosis has attained its complete development there is nothing to be done? There will certainly be a demand for the physician's intervention, and there is much that you can do in the way of controlling the mechanical troubles effected in the portal circulation, and in particular the ascites which results therefrom.

Is it then possible by diuretics or purgatives to cause the ascites to disappear?

This is the opinion of some authorities, who believe that they find in cirrhosis an indication for the anti-hydropical (evacuant) medication of which I spoke while on diseases of the heart.† I do not hold this view, and I maintain that in the majority of cases, diuretics, and especially purgatives, have no effect in removing the abdominal effusion, and when you continue these medicines too long, for reasons obvious enough, you injure rather than improve the state of your patient. I think, then, after a few moderate trials it is better to discontinue diuretics and drastics.

* The following are the notes of this case: M. R., watchmaker, aged 44 years, of somewhat intemperate habits, which he had contracted during the siege of Paris.
This man was in an advanced state of cachexia, the liver was voluminous and irregular, urine small in quantity and high colored; he had diarrhœa and was emaciating so rapidly that we at first thought it was cancer of the liver making rapid progress.
This patient was subjected to milk diet, and blisters were applied over the hepatic region. After six months of treatment he got completely well, and has kept well ever since.

† Diseases of the Heart, Vol. I, p. 83 (Ed. of G. S. Davis, Detroit).

Is it advisable to resort to tapping?

Here, also there is much dispute. In most cases, and I have only to call your attention to what takes place before your own eyes in our own wards, you will see that tapping, in the true cirrhotic, instead of prolonging life, only hastens the end; hence I remain, generally, deaf to the entreaties of my patients and put off the operation as long as possible, and only perform it in the last stages, when the patients are becoming asphyxiated by reason of the enormous development of the abdomen. This custom, gentlemen, is not peculiar to myself, but quite as much characterizes the practice of a great number of my colleagues.

The annals of medicine, however, contain some curious cases in which patients have been known to hold out for months, even for years, owing to tappings frequently repeated, and even recoveries have been reported by this means.

The number of recoveries is greater than one would think. In the discussion which took place in 1855 on this subject at the Medical Society of the Hospitals, a large number of our colleagues related facts of this kind, and LANCEREAUX, in a communication made in 1886, cited still other examples.

I have myself published an interesting observation of a patient affected with alcoholic cirrhosis, who was tapped and got well, continuing so for three months, till by an imprudence, he contracted pneumonia and died. The autopsy enabled us to confirm our diagnosis, interstitial hepatitis being found.*

There is, then, a question of opportuneness, which must first be settled. In certain cases, in fact, the cirrhosis affects only a limited portion of the hepatic gland, and if the patient, by an intelligent hygiene, by absolute abstinence from alcoholic drinks, succeeds in arresting the invading course of the hepatic sclerosis, it is easy to understand that by reason of the oozing of the liquid from the veins being slow and in small quantity or even arrested altogether, owing to a sufficient supplementary (collateral) venous circulation, paracentesis practised in due time frees the abdomen, favors the portal circulation, and puts the patient in a better situation.

On the other hand, when the cirrhosis is complete, tapping can only be palliative, and the obstruction to the circulation remaining, the abdomen speedily fills again with the liquid effusion, and thus the blood is drained of a large quantity of its serum; it stands to reason, then, that this abundant serous blood-letting will enfeeble if it does not quickly kill your patient already cachectic.

How are you to judge of the opportuneness for paracentesis? If you have to do with a young, vigorous subject, if the digestive functions are performed with sufficient regularity, if the nutrition is not too profoundly disturbed, your duty is to tap, and to watch and see if there is more or less speedy reproduction of the liquid. If the abdomen speedily refills after three or four days, recovering its former distension, it will not do to repeat the tapping. If, on the contrary, the patient has derived benefit for a fortnight, three weeks or a month from the paracentesis, you may repeat the operation.

But when the cirrhotic patient is very cachectic when his emaciation is considerable, when assimilation is not, or almost so, I believe that if you desire to prolong the life of your patient, you should not perform tapping. The economy becomes habituated in a certain measure, to the often enormous accumulation of liquid in the abdomen, till little by little the patient becomes enfeebled and succumbs to the cachexia.

As for the rules which should govern you in the performance of paracentesis abdominalis, I will not take up this subject, for it is as you know one of the most simple and easy of operations; at the same time I will call your attention to two points: First of all, you should be careful as to the place where you make your trocar-puncture, in order to avoid wounding any enlarged and distended veins which in the cirrhotic ramify so abundantly upon the abdominal wall. Then, when the tapping is terminated, you should see that the patient lies on the side opposite to that where the puncture was made, and that he keeps this position for some time, in order to enable the wound which you have made to cicatrize. You thus avoid those fistulæ which often remain behind, and which are exceedingly disagreeable, for they soil the patient's linen and produce cutaneous inflammation.

Apart from this interesting question of paracentesis, are there any other indications for the treatment of cirrhosis? I know of none that are very clear, with the exception of milk diet, whereby, in fact, you may be able to augment the quantity of urine, support the patient, and prolong his life. This is indeed very little, but, I repeat, this very paucity of therapeutic resources results from the profound disorders effected in the hepatic gland, disorders which are always beyond the reach of any medicinal treatment.* I shall finish what pertains to the

*Dujardin-Beaumetz "On the Treatment of Cirrhosis," (Soc. Med. des Hôp. 1886).

*In cirrhotic dropsy the Squill, digitalis and calomel pill (each one grain), t. i. d., will sometimes be found useful, and and of all the hydragogue cathartics, elaterium (1-12 grain in pill every two hours till abundant serous discharges are obtained) will probably be found the most effectual. Roy (Southern Medical Record, Jan. 30, 1884) speaks highly of this treatment, and in addressing his medication to the hardened, shrunken liver, he recommends 1-30 grain corrosive sublimate, t. i. d., with a little muriate of ammonia in simple elixir.—TR.

treatment of diseases of the liver by devoting a lecture to hydatid cysts of this organ.

A DESCRIPTION OF SOME NEW INSTRUMENTS FOR PLASTIC OPERATIONS ON THE VAGINA.

BY EDWARD W. JENKS, M. D., DETROIT, MICH.

At the meeting of the Michigan State Medical Society for 1877, the writer read a paper entitled "Some of the Plastic Operations within the Vagina," in which he described a new mode of operating for laceration of the perineum, and later one of his clinical lectures relating to the same procedures was reported by DR. HERSEY for the Toledo Medical and Surgical Journal. Owing to the absence of cuts in both of the communications above referred to, the writer's mode of operating was not well understood, as was evinced by the great number of letters of inquiry received from various sources. Some of the writer's most valued gynecological friends expressed a desire that at least his mode of denuding the parts in plastic operations within the vagina should be given greater publicity. Accordingly a paper was prepared which was first read at a meeting of the Cincinnati Obstetrical Society held Jan. 8th, 1879, and was subsequently published in the American Journal of Obstetrics, etc., for April 1879, entitled "Perineorrhaphy with Special Reference to its Benefits in Slight Lacerations and a Description of A New Mode of Operating." This paper was illustrated with eight wood-cuts. Owing to the extensive circulation of the American Journal of Obstetrics the writer's views relating to perineorrhaphy and his mode of operating soon became generally known, and the method of denuding which was described in the last paper referred to was soon adopted by many distinguished and well-known operators and has long since become the general property of the profession.

In this brief paper the necessity of the operation of perineorrhaphy, or the variety of operations that have been advocated will not be alluded to, as the object of the present communication is merely to describe some new instruments that have been devised for the purpose of facilitating any of the plastic operations within the vagina where sub-mucous dissections are made and more especially in perineorraphy.

In the paper last referred to occurs the following description of denuding the parts: "I begin by nicking with scissors the anterior margin of the surface to be denuded, at the juncture of integument and mucous membrane; next, I introduce two fingers of the left hand into the rectum, while assistants hold the labia apart, it being important that they are held uniformly tense. I use scissors slightly curved and sharp-pointed to denude the mucous membrane. I use neither tenaculum nor tissue forceps, but with the parts tense, snip a hole in the mucous membrane in the median line close to the integument, and then inserting the scissors with a cutting motion into the small hole made, I continue to dissect the mucous membrane from the subjacent tissues without removing the scissors, first going up the septum as far as is desired, and then laterally, first on one side and then on the other, without removing the scissors or once bringing their points out from beneath the mucous membrane."

In this paper was a cut illustrating the kind of scissors which I believed to be best adapted for the operation. I have continued to use the same pattern until quite recently. But owing to the difficulty in some cases of continuing the "cutting motion" referred to, and sometimes being obliged to withdraw the scissors somewhat, I concluded to try a different pattern. Last September I directed Geo. Tiemann & Co., of New York, to make me a pair of scissors with the same anterior curve of the blades as the old, but in other respects differing, as can best be shown by reference to the subjoined cut.

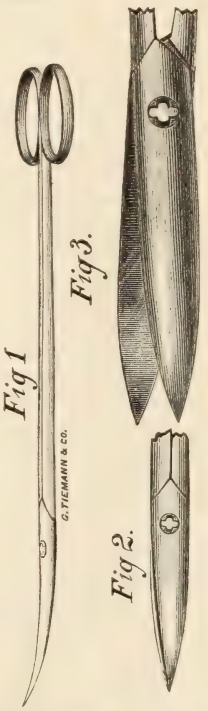

Fig. 1 illustrates the exact anterior curve of the blades. Fig. 2 with the blades closed shows that they completely over-lap each other. Fig. 3, with the blades slightly separated shows the cutting edges diverging. There is another important feature of these scissors which cannot be well shown in the cut, viz., the point is ground sharp and so are the outer edges of the blades.

The advantage of these scissors over former ones consist in (*a*) the sharpness of the points and outer edges of blades by reason of which the sub-mucous dissection is more easily accomplished. (*b.*) The shape of the blades completely overlapping each other when closed, thus causing the cutting edges to diverge, has been found to be of great advantage in submucous dissection, for the reason that the blades are less opposed by the tissues and a cleaner, smoother dissection can be made in less time.

It is necessary that these scissors should be

kept in a case, as otherwise the sharp points and outer edges will become dulled by contact with other instruments. It is the writer's belief, in which TIEMANN & CO. concur, that the same general principles of construction will be advantageous in other surgical scissors, with the exception of the outer cutting edges. In every instance in which these scissors have been used the diverging inner edges have seemed to be of advantage.

In the paper published in the American Journal of Obstetrics, April, 1879, is a representation of a knife (Fig. 4) having a dart-shaped, thin blade with double cutting edges, which was devised by the lamented DR. ALBERT H. SMITH, who had tried the method of denuding of which I had previously informed him, and at once adopted it. DR. SMITH believed that as some could better denude with a knife than with scissors had one made, and, after several trials, finding it satisfactory, he had another made and sent it to me. I have occasionally made use of the knife devised by DR. SMITH, but have often thought of having another one made. Last September I requested MESSRS. TIEMANN & CO., of New York, to make such a knife as is illustrated by the subjoined figure.

The knife here figured is thin and the blade similar in shape to an ordinary thumb lancet. It is very highly tempered, thus admitting of the degree of flexibility that is shown by the dotted lines of the "side view."

I have found this of very great service in perineorrhaphy where there is much cicatricial tissue, and particularly so in operations upon the perineum, of which a description will be given hereafter. This knife will, doubtless, commend itself to those more familiar with the use of surgical knives than scissors.

84 LAFAYETTE AVE

CLINICAL LECTURE.

BY HAL C. WYMAN, M. S , M. D., DETROIT, MICH.*

INJURY TO THE WRIST JOINT.

Gentlemen:—This man comes before us with this history: He is a painter, 34 years old, of easy habits, and always a resident of Detroit. His parents were born in Ireland. This morning he went to work painting on a scaffold. Yesterday and late last night he was "out with the boys," as he tersely expresses it, and got his nerves a little unsteady. While painting he fell from the scaffold to the ground, a distance of 20 feet, receiving the injuries which you see. He was picked up by the ambulance and brought here. You will observe some blood on his face and shirt. The ambulance surgeon tells us he could find no bleeding wound of face or scalp, and that he was losing blood from the nose when he found him. He was not unconscious, and, as you hear, he tells us how he thinks the accident happened.

Notice how he holds his left hand; observe the deformity of the wrist, and, as I manipulate it, see how the functions are impaired. The style of the ulna is absent, and in its place we have a marked flattening, which is better appreciated by comparing it with the prominence on the other wrist, which is sound. Closer, firmer manipulation in search of crepitus shows that the style of the ulna has slipped under the tendons, or perhaps the annular ligament—it matters little where you say it has gone, if you only recognize its displacement, and so manipulate the parts that it is restored. Now, you see I take this injured right hand in my right. I ask my assistant to make steady the elbow. Now I pull with my right hand, making steady extension of the wrist-joint; at the same time I hold the injured region between the thumb and fingers of my left hand, and while steadily pulling, execute the motion of pronation and supination, and while the pronation is extreme, I feel, and you perhaps hear, the styloid end of the ulna slip into place. Again, examining the two wrists we see that we have restored the injured wrist to a shape quite like that of its fellow. The most serious part of these injuries —the loss of the prominence on the outer side of the wrist, has been overcome. We cannot always be so successful in the reduction of those injuries, which are commonly grouped under one term, Colles' fracture, because (1), we do not always see the case so soon after the injury as we have seen this one, and (2) the tendons which over-ride the displaced styloid process can not always be gotten out of the way by manipulation. So serious are the consequences of a displacement of this kind to the patient, so great the pain and the loss of motion and use, that some surgeons have advised making an incision and using the finger or a hook to pull aside the tendons that cannot otherwise be dislodged, and thereby free the imprisoned bone. Now the treatment in this case is very simple after the work of reduction has been accomplished. Our patient will probably suffer no great pain even if considerable portions of the radius as it enters the wrist, are broken off. We feel quite safe about the case because our treatment thus far enables

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us to put the joint through all its functions--flexion, extension, abduction, adduction, pronation and supination. The tendons and fascias of the injured region as they swell will make an excellent splint and induce physiological rest until the process of repair is completed. We will however, apply a strip of pasteboard, dampened, about 2½ inches wide and 10 inches long. We will put one end of it in the palm of the hand and extend its length along the palmar aspect of the fore-arm, fasten it, as you see, with a roller bandage which will mould the pasteboard to the parts and give a feeling of rest and comfort to the patient. We also make a sling of this square piece of sheeting by tying the most widely separated corners behind his neck. The injured wrist, hand and fore-arm are now laid in the sling and he is allowed to go, with orders to let us see him every other day.

I am very particular to have these cases reported often. You can thus have abundant time and early opportunity to make any needed change in treatment. A man who drinks is always a dangerous patient; you must watch him closely that inflammation, fever and abscess do not cause him damage.

DISLOCATION OF SHOULDER.

CASE 2.—This woman is 26 years old, she has been married eight years and is a mother of four children. She is pale and her voice is filled with emotion when she speaks. She relates that she had a controversy with her husband yesterday, and confesses that they had been drinking. Her husband, she says, threw her down the short stairs, which means threw her from one room into another by way of a descent of probably three feet. You notice that one shoulder droops, that the elbow is thrown out so that it looks through her clothes as if it was sticking in her side. It is best to remove all superfluous clothing from the upper part of the body when examining cases of suspected injury to the shoulder. The house-doctor has examined her and reports her sound except the right shoulder on which she struck in her controversy. As she sits before you with bare shoulder, you notice discoloration of the skin about the shoulder, and there is great flattening over the deltoid muscle. Contrasted with the sound shoulder, the injured one seems to drop square off from the acromion process. In front of the coracoid process and beneath the pectoral muscles we see a bulging and with our fingers feel the head of the humerus in the axilla. This must be reduced. The house surgeon has made one attempt with his heel in the axilla. Putting the patient under the influence of chloroform all muscular resistance is overcome, and raising the elbow to a height level with the scapula, we apply extension by pulling strong with both hands. We also remove our shoe and putting our heel in the axilla are able to accomplish the reduction which you will observe took place with a very audible snap as the head of the humerus slipped into the glenoid cavity of the scapula. Dislocations of the shoulder are very liable to recurrence, and we must bandage this one in such a way that there will be no secondary displacement. No doubt many a good surgeon has been mulcted in the courts in cases where after making a reduction of a dislocated shoulder there has been a subsequent dislocation through the patient's carelessness or neglect. Many times the patient leaves the physician's office in a maudlin condition, the result of the whiskey that has been poured into him by his sympathetic friends soon after the injury was received. It is, therefore, only strange that more serious consequences do not follow. We will put the patient's forearm in a sling and take several turns with a roller bandage around his arm and chest, binding his forearm snugly to his side. In a few days the ruptured tissues about the injured joint will begin to heal and the patient can have a soothing lotion to rub on the shoulder. Tr. opii, ℥ j; plumbi acet., ʒ ss; aquæ camph., Oj, M., is one of the best remedies I have used to relieve the pain which will be found in the region of the supra-scapular notch during the process of recovery. Sometimes after such a dislocation great pain will continue in the point of the shoulder, caused probably by displacement of the long head of the biceps muscles from its groove in the humerus; then great good comes from the use of a blister over the region which is the seat of pain.

To the vesicated surface morphine in one-third grain doses, once in four or five hours, may be applied with the result of greatly relieving the patient. My experience with dislocations of the shoulder leads me to say that more skill and knowledge is needed to conduct the patient to a recovery of the uses of his shoulder after the operation of reduction has been performed, than is needed to reduce the dislocation. Patients will come to you again and again with pain here and pain there about the shoulder, fearing that some little bone is not properly in place. They lie awake nights and lose appetite, with numb and prickling sensations in the hand and fingers, when the most thorough search you can make fails to reveal pressure on the brachial plexus or any interference with the circulation. You can find no physical lesion to account for your patient's suffering. Electricity, massage, the manipulation under chloroform known as "breaking up adhesion," are means which may be useful in relieving the patient. But the best treatment is to prevent, if possible, the development of the pains mentioned.

I have found the early resort to passive exercise of the injured joint useful in that way. Exercising care that the patient does not develop too much joint action while the dressings are in place and the torn joint capsule is healing, giving the patient the use of the forearm and hand just as soon as it can be trusted out of the sling and encouraging at the earliest possible moment, slight movements of shoulder joint, are most useful measures in preventing the distressing sequelæ of shoulder dislocation.

Correspondence.

COLLEGES AND DOCTORS—A REPLY TO A. B. R.

I take the stand for my classmates and many who graduate at the presant age, takeing this subject personal to myself. It has ben but little over one year sence I graduated in what you would call a onehorse, but a grand blooded Aleopathic College on the easton bank of the missipi. that College did not have any Deploma mill attached. But I'll tell you what it did have. It had a Hospittle and a large amount of Clinical and Anatomical material. It is true I bought my Deploma in comman sense, with the sweet of my brane and thirty dollers to pay examination fees; that was about three dollers for each of the Profesers. Now as little a Dr. as I am I would feel like chargin a patient three dollers for an hours frayful attention as that was. I purchased a good lot of improved medical litature, some doubtless the graduating class of tweenty years ago never saw. I studdied old Grays Anatomy like a prayer book. I studdied Dalton withe attention and care, and considered Barthalow Loumis Erkson and gross as an Oratharity, the Professers taught them to the letter, did you learn from them books or did you learn from something better. Again to make this story short. I am a poor boy and so are nine tenth of all the graduating classes. I considered if I made a bust it would take me back to the plow handles or worke shop for five years; to make me take another course, that is the reports I hear from all cuntries and nearly all students. I dont know where to find such colleges as you spoke of. I dont think they would pay, because the Poor Boys would not be able to have their deploma ground, and there is not a great many rich medical students. eaven if there was it would take a great deel to keep their deplomars sharp and pay for mall practis boath. you seem to say that there ought to be something to cut the suply docktors off, but when the demand ceases the supply will cut its self off. As the world increases so does all Profeshions; there is more manufactors because the demand is greater; more lawyers and more docktors. I feel that I have got as much right to practis medicine as any other graduate and as much right to suffer for mall practis as any body elce, if I do such as may as mill graduate have got the same arthority. do let the young and rizeing pofesian alone. rather help them than to push them back, they will have to come and practis on your children when you are dead and gone. the greater the study the greater the gain. I consider a Dr. a misionary at the cross. and ife he practis medison to get rich he will loose the fragrance of his calling to fail in his calculations, but he that attendeth his fellow patient as a mother attendeth her child will receive a mothers reward.

Concerning the chairs, they have got to go by arthority, they ar responcible for what they teach, they all teach from books: Some Profesers are smart enough to get out a books of their own they sell them to you and teach them also, other Proffesers buy those book read and teach them and it all about the same thing at last, the chair is due honor they study and teach in abedience to that honor. I have sometimes notised monied men honored unjustly but it hapened it as the collor of my own mind, if the Faculty choosees a monied man he is more able to suply himself withe medical literature, some of my Profeser was rich and I felt that the honor was due them.

Again speaking of spelling, I am like that Professer that you spoke off, the time has ben that I could not spell water, I got turned down on buiscuit and had to stay in one recess for not spelling Bronchitis, but I consider that spelling has not a great deal to do with the influence and effect of medicine, if I spell Quinine withe an m that is no reason that I dont know better or dont know what the dose is, the study of medison is the study of common sence.

T. J. K.

[From the card which our correspondent sends us, "as a guarantee of good faith," we learn that the gentlemen is a "Physician, Surgeon and Obstratition." Ed. Med. Age.]

MAN, THE BEAST.

On page 251 of the Medical Age I find an editorial entitled "Man, The Beast." There is no doubt that the average person of both sexes misunderstand the sexual instinct, and the anonymous female writer in the French journal is perfectly right. The distinction of sex does not imply sexual feelings, hence every child borne implies rape, and brute man is the sole actor.

Women prefer sexless companions, would, in fact, much rather marry an impotent than a perfect male.

It is perfectly correct to bring up our children

in the belief that to acknowledge sexual passions is an evidence of depravity, because the policy of repression always brings forth good fruits; society is bright in ignoring stone walls.

Because women do not want children every year is proof of their deficiency in sexual passion. The sleepless nights, constant hard work and stinted income, has nothing whatever to do with the disinclination of some women for sexual relations.

We prove it by the absolute refusal of women (who do not conceive) to engage in these relations. In fact, the cases of refusal to engage in sexual relations by some women with their husbands, and then their being caught in the act with a lover, only proves that the non-sexual feelings of the female is normal to the whole sex.

The idea that human beings will, nine cases out of ten, under exactly the same circumstances act alike, regardless of sex, is of course wrong, very much so. Men are men, and if the relations of society and the sexes were suddenly changed women would not avail themselves of their newly-acquired priveliges, and all the society virtue would continue to be lodged in the female sex. It is not the dread of the possible consequences of illicit intercourse which controls; it is innate purity.

Physicians never find cases of sexual irritation occurring in women—normal women. FAYETTE TAYLOR'S article, in the American Journal of Obstetrics, 1882, "Effects on Women of Imperfect Hygiene of the Sexual Functions," is all wrong.

The present fashion of a man being father to a family of sexless daughters is correct, and is not the cause of half of the trouble in society. Men prefer sexless wives. A woman that enjoys the sexual relations would not be respected—if she would own to it. The world is moving in the right direction, and nature never takes revenge. She never extinguishes imperfectly-developed human beings.

CHARLES AMBROOK, M. D.

BOULDER, COLORADO.

RÖTHELN.

Beginning about Feb. 1st., 1888, this town and the surrounding country has been infested with rötheln. It being our first epidemic there was a wide field for the disease. As we have an epidemic of rubeola it has been difficult to determine the diagnosis in some cases. I have observed however that there is a marked difference in the two diseases, viz.: In rotheln even before the eruption appears, there is an enlargement of the posterior cervical glands, a mild catarrhal stage, more stiffness about the neck and also of the joints. The general systemic symptoms are milder temperature for about 24 hours just preceding the eruption, ranging about 100° F. to 101° F. In one case, a child 3 years old, temperature 102° F., with a convulsion just before appearance of rash. Sore throat was not a marked characteristic in my experience; anorexia was not the rule. Disease does not spread as rapidly as rubeola. Commencing Feb. 1, we have at this date, June 14, quite a number with the disease at its height. Children go to school and resist the infection for a time but eventually succumb to it. Of sequela perhaps aural affections are the only ones noticed.

The character of the eruption varies, there being three distinct varieties, viz: A fine rash resembling heat, a large exanthem resembling rubeola, and occasionally a case with large irregular spots or blotches. Disease lasts about three days, with only 24 hours in which the patient complains of being sick. I believe the disease should be classed as a form of measles, since it simulates rubeola or common red measles more than any other disease.

As to treatment there is not much call, for unless in a nervous subject or one who is suffering with some other disease when the disease in question manifests itself, I have usually prescribed a heart sedative with one of the bromides in the first twenty-four hours and have had no occasion for any extended treatment.

L. E. PARK, M. D.,

Tracy, Iowa.

It is very refreshing, in view of the bias of the clerical profession toward quackery, to note such an arraignment of the latest humbug, Christian Science, as is contained in a sermon by the REV. BREDDIN HAMILTON, of this city, on the 24th inst. "We cannot pass along in this manner," says MR. HAMILTON, "without noticing the unpardonable ignorance and terrible inconsistency of those who claim, as you all know, to hold the only key to the bible, and who have flatly contradicted the word of Christ and the teachings of the bible when they say that there is not bodily suffering. It is the old story of Demetrius and the gods. A man attempts to take money from his fellow men without rendering to them any fair equivalent, and we call him a cheat, fraud. But when we see men and women taking the Christian religion of our Christ, which we all hold so dear, and trying to bury it up in the murky haze of delusion for the sake of a few material dollars, we feel obliged to call them something much worse than frauds—unprincipled blasphemers. I hope the day is not far distant when not only the tribunal of the church, but also our great National tribunal will condemn this demoralizing craze."

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., JUNE 25, 1888.

Editorial.

THE LADY OR THE TIGER.

Every practitioner of experience will recall those times in his life when he hesitated, while weighing in the balance all the evidence, before thrusting his bistoury into a suspected abscess. Does it fluctuate? Does it contain pus? Have I the *tactus eruditus?* Are questions he asks himself while manipulating the tumor, and when at last he decides and makes the incision and has on his lip to say *voila le pus!* What if blood instead of pus makes the dramatic climax? Not a few times has aneurism of the neck and fauces been fatally mistaken for abscess. Synovial fluid has been turned out of joints where pus was looked for, and unnecessary fright and suffering have been inflicted upon the sick.

The great story-writers who devote their lives and their best powers to the study of human character and the evolution of thrilling narratives or delightful romances, do not under the best circumstances meet with material for the pursuit of their calling, equal to that which comes to the average practitioner of medicine and surgery, and suitable for story-building.

Even the now noted FRANK STOCKTON who after years of drudgery and hard work as a poorly-paid newspaper-writer—because as a class newspaper-writers are poorly paid—has achieved fame and a competence through his story: "The Lady or the Tiger;" even MR. STOCKTON does not know how nearly he succeeded by his power of imagination, in presenting in that story, a common incident in a physician's life. Even the title "The Lady or the Tiger," is as applicable to the one incident as the other.

Instead of presenting the spacious amphitheatre with its adjoining wild-beast dens and its vast audience present to see the hero in MR. STOCKTON'S story, make the final choice which is to decide his future happiness or his immediate death, let us give a view of a humble domestic picture:

In a cosy and neatly-kept little cottage the physician meets a contented, affectionate and happy wife and mother. In the strength and beauty of youth and first motherhood, she greets the visitor most earnestly, hardly succeeding, however bravely she tries, in the concealment of her anxiety. She has confidence in the ability of her physician, but it does not quite counterbalance the fear that she has because of her baby's illness. Her intelligence tells her that self-possession and promptness of action are absolute necessities, yet her mother-heart tells her that there is danger of the saddest results. While she is the personification of gentleness, devotion and good breeding, there is that in the nerve tension of her being, which suggests opposite possibilities should sufficient cause arise, and as she tenderly soothes the little bit of suffering humanity in her arms, it is a warning to the doctor to make no mistakes.

The doctor, if he is sentimental (and most good doctors have that characteristic to a reasonable degree), sees in the child the full fruition of the young mother's fondest hopes, and the absolute embodiment of all her affections and ambitions. It is her life here and hereafter that, carefully wrapped and most gently fondled, lies there in her arms; it is the prize which, if the doctor wins, makes of him a god; if lost, makes of him a devil, at least in the eyes of the mother.

The baby has been ill, the mother has nursed it carefully, perhaps a physican has been called, but certain it is that everything that love, skill and money could do for the little one has been done. For some reason and in spite of all preventative steps, there has appeared on the soft, rosy and delicate neck of the baby an unnatural, unsightly and painful swelling. It is not only very painful to the child but it is a terror to the parents. They do not know exactly as to its character, and trusting to their physician they are shocked beyond measure when he suggests the use of a knife upon the neck of their loved one.

The more they consider it the more horrible the proposition appears. They fancy a great gaping wound with its accompanying flow of blood, and as they look at the poor suffering child they suggest that other less dangerous and equally efficient steps are possible. The doctor is firm. His diagnosis is that there is pus which must be evacuated by incision.

"Are you sure it is pus in there?" asks the mother, and the doctor repeats that he thinks so. Accordingly, wrought to the highest pitch of desperate courage she prepares the little one and the doctor proceeds to make the incision.

It is made.

Did he find pus or did he find blood?

Was it "the lady or the tiger?"

So far as the situation above presented to the practitioner and the mother is concerned, it has dramatic strength for them ten times more potent than is contained in the fiction so

cleverly constructed by MR. STOCKTON. The discovery of blood after the knife has done its work means to the doctor the ruin of his prospects and to the mother while it may not mean the loss of her little one, it does mean the loosing of the tiger. Every doctor meets scores of situations similar to the one above presented, and in each one there is behind the one door the lady of perfect success, while behind the opposite door crouches the big beast, the tiger of failure.

Notes.

MR. CHAUNCEY M. DEPEW met with a temporary set-back in his laudable ambition to be President of the United States, but the fact does not prove him to be any the less the profound thinker and the man of honied eloquence. The following are a few sentences culled from a speech made by him before the Syracuse Medical College a week or two ago:

"The rush and worry, the wear and tear, the rapid pace of our American life, irritate our nerves and render us peculiarly sensitive to impressions. The personality of the doctor, his disposition, his habits, and his character form a large part of his success or failure. The vain and pompous doctor who thinks so much of himself that he fails to appreciate the weakness and watchfulness of the sick, leaves behind him a sense of neglect and indifference which neutralizes his medicine. The discursive and argumentative doctor airs his opinions on politics or theology to aching bones and fevered brains until only weakness keeps the outraged victim from murder. The grossest injury to the helpless patient, absorbing with every breath the spirit of her environment, is the polluting presence of the doctor saturated with whisky or tobacco."

"I have no faith in mottoes, or maxims, or rules for success, and, though often asked, never have any to give. A young man who has good health and governs his conduct by a conscientious answer to the ever-present question, Would my mother approve? and gives tireless attention to his business, is certain to succeed. It is impossible for everyone to win fame or fortune, or both; but the man who earns a living, even in a very modest way, feels the inspiration of independence, and has safely passed the precipice of failure. Repinings for riches and angry envy of prosperity weaken the moral tone and mental fibre. They paralyze effort, and end in empty vaporings in the bar-room and empty larders at home. The opportunities for accumulating large fortunes rarely come to members of the liberal professions. Their compensations are in the position and influence accorded to their culture and training. With them self-support is success, and when the surplus surely comes, and with it home, larger comforts, and fair competence for declining years, they enjoy a measure of happiness and content rarely found with the use and care of great wealth."

The meeting of the Michigan State Medical Society in this city on the 14th and 15th inst. was in every respect a pronounced success in the accepted signification of this term. This much we are permitted to declare without running the risk of being disciplined. It would have given us much pleasure to present our readers with a full report of the Society's proceedings, but the insane rule which prevents the publication in a medical journal of any paper prior to its appearance in the Transactions, interposes. The beautiful consistency of the Society in this matter, is brought out in bold relief by the appearance of reporters of the daily papers at a table on the platform, during the entire session. Not a word of complaint is heard against the reports which these gentlemen prepare for circulation among the laity. Convenient accommodations are, indeed, furnished by the Society for the representatives of the lay press, but the medical press is ignored. We have year after year called the attention of the Society to its asinine imbecility in this matter, but to no purpose. The rule to which we refer is suicidal in the extreme. It was adopted to suit the whims of a few officious little officials, and its continuance in the face of the injury which it is working to the best interests of the Society, is one of those anomalies which it is impossible to fathom. The medical press will, however, endeavor to struggle along in spite of this absurdity, and so long as gentlemen are content to annually meet and perfunctorily read papers which they voluntarily consign to interment in "Transactions," which are read only by those who contribute to them, so long will their Society be tolerated as a respectable kind of bore by the wide-awake profession. The Society elected as its President for the current year, DR. S. S. FRENCH, of Battle Creek, a gentleman whose long years of faithful devotion to the profession, and whose uprightness of character eminently fit him for the position.

At the last meeting of the Ophthalmological and Otological Section of the New York Academy of Medicine, the following motion was carried:

"That a committee be appointed, of which the chairman of the section, DR. DAVID WEBSTER, be a member, whose duty it shall be to obtain a good photograph of the late DR. CORNELIUS R. AGNEW, for the purpose of having engravings suitable for framing made from this. The right of issue and sale of such engravings shall be given to some first-class publisher, if practicable; if not, the committee shall offer them to the profession at cost."

In accordance with the above, a committee has been appointed. Members of the profession who desire such an engraving accompanied by an autograph signature, should send their names and addresses to the Secretary of the Committee, DR. CHARLES H. MAY, 640 Madison Avenue, New York City, at once. When all such names shall have been recorded, those who have requested a copy of the engraving will be notified of the cost of the same, either by the publisher, or by the committee having the matter in charge.

Medical Progress.

ABSTRACT OF A PAPER ON AIDS TO DIGESTION.—*Pepsin.*—The period of greatest activity in the conversion of albuminous products in the human stomach, due to the presence of pepsin, either normally or artificially supplied, has been fairly demonstrated, and covers an interval variously estimated at from one to two hours and a half. The gastric fluid being acid, it follows that the most suitable medium for securing the full effect of pepsin should be the same, and accordingly the addition of an acid has been recommended. The fact remains, however, that this acid condition of the stomach does not determine until some time after taking food, estimated at from one-half to three-fourths of an hour.

The conversion of albumen into soluble peptone, the so-called proteolytic action, is a matter of great moment as regards the proper maintenance of a normal health standard. When primary assimilation is faulty, the whole economy suffers by reason of imperfect secondary assimilation, and the most highly organized tissues first sound the note of complaint, fugitive neuralgic pains being a common symptom. Pepsin steps in here to fill the breach, and, judiciously employed, in an incredibly short time will work wonders. The best time, theoretically, for the exhibition of pepsin products, alone or in combination, is about an hour after taking food, and clinical evidence appears to confirm this proposition. There are, however, exceptions to this rule, the most notable being indicated by an acid condition of the salivary secretion, tested by litmus paper. Such patients would doubtless derive greater benefit from a small amount of some mild alkali, and, when pepsin is added, but little advantage will accrue unless the alkali selected is of the nature of a ferment, like pancreatin for example.

Pancreatin.—The action of pancreatin is not confined to the non-nitrogenous constituents of food, and to a certain extent, therefore, it takes the place of pepsin. Its complex character will be understood by reference to the active constituents, amylopsin, steapsin, and myopsin, names coined to indicate the different directions of its activity.

Mr. Schweitzer and Dr. Dobell, in experimental trials with pepsin and pancreatin, have shown the relative value of the two agents, which may be summarized as follows: while pepsin digested 80 parts of albumen, pancreatin digested only 27 parts, but in addition, 150 of lard and 236 of starch.

To recapitulate, then, we may safely conclude that pancreatin will aid digestion if given at the proper time and combined with a suitable medium, by acting upon albuminoids as pepsin does, though less vigorously, by its power to convert starch into sugar and emulsionize fats. Clinical observation has furnished a large number of cases illustrating the truth of these statements, which will be alluded to as space permits. The method of administration will be modified to suit the taste of patients, and combinations with it will depend on the diseased conditions present.

The Saliva.—Numerous observers have shown that saliva is an active agent in the conversion of starch, and, when the system is in normal condition, its alkalinity stimulates the flow of gastric juice. The claim has been advanced that the saliva assists in perfecting the gastric secretion, by contributing to the latter in some occult manner certain constituents, although the theory possesses no foundation in fact. That the mere presence of saliva exalts the gastric function cannot be denied, hence we arrive at the following conclusions: (1) Acids introduced into the stomach along with food, not only interfere with the amylolytic action of saliva, but retard gastric secretion: (2) alkalies, on the contrary, increase gastric secretion, but at the same time, by diluting the saliva, the conversion of starch is arrested. The important rôle of the saliva in the economy may be estimated by reference to the case of Wright, who is said to have collected in a week from his own glands a quart, losing in that time twelve pounds in weight by the operation.

A Combination of the Digestive Ferments, from a theoretical standpoint, would overcome these difficulties, the proportion of each agent being adjusted to the wants of the patient, and, clinically, the method has proven in every way practical, since laboratory investigations have enabled us to determine the possibility of both pepsin and pancreatin operating in the same media at the same time. The plan may be opposed by the ultra-scientific, but no objection can be maintained on the score that it is contrary to the harmonious workings of Dame Nature. How many of my readers are familiar with the late Prof. Gross's prescription for dyspepsia, "eat pickles"? How many deluded laymen are to-day innocently taking large quantities of bicarbonate of soda for the same disease? Perhaps the large majority of sufferers have joined their fortunes to the "hot-water army," but there are several brigades who still acknowledge allegiance to ice-water, the inveterate American destroyer; and several platoons have been recruited to march under the banner of "Christian Science."

Another reason for the lack of appreciation undoubtedly lies in the fact that too much is expected of them, and a few suggestions may be profitably interpolated here for the purpose of excluding several classes of cases not properly coming within the range of the digestive ferments. Lithæmic cases, in which the indigestion is merely incidental to the progress of the disease, or, as we say, secondary, will not improve, except temporarily, under the use of either agent, or any combination within the skill of man to concoct. When indigestion is merely secondary to imperfect metabolism, as in the case of deficiency in the hepatic function, the use of both pepsin and pancreatin is barred, except in so far as these agents may be demanded in order to secure more perfect primary assimilation.

Hereditary tendencies must be met and controlled in like manner, and the habits of patients require modifications ere the digestive ferments can be profitably employed. Manifest indications are apparent in a long list of ailments, some of which may be conveniently enumerated. Functional disorders of both stomach and bowels present an extensive and promising field for labor.

Loss of Appetite, a common and frequent com-

plication, comes first in order. It appears either as a disordered function, or, when long continued, as a derangement of the general system. The condition of the secretions, from an examination of the tongue, serves as a guide in detecting the cause. Headache, a slightly accelerated pulse, with pain or tenderness after eating, constant dryness of the fauces, accompanied by eructation of gas and a coated tongue, direct attention to the stomach. Liquid pancreatin, one drachm, combined with normal liquid nux vomica, one drop, or strychnine sulphate, one-sixtieth grain, taken with meals, will prove the best peace-offering the physician can prescribe. If the appetite is capricious, no combination offers more favorable prospects of success. Constipation occurring incidentally here may be overcome by inserting into the rectum occasionally a rectal capsule containing a small quantity of glycerin.

Acidity, either before or after meals, is an ailment especially amenable to pepsin with an acid; the patient being particularly instructed to avoid potatoes and other starchy foods. This acid condition may be due to various causes, as decomposition of food and fermentation dependent on slow digestion following disordered condition of the mucous membrane; to acid formed in the stomach, as hydrochloric, lactic, acetic, carbonic, oxalic, or butyric, and these, entering the blood, may cause heartburn. The litmus test of the saliva should not be omitted here, as it supplies an important link in the chain of evidence.

Flatulency.—Given, a case of stomach flatulence due to a want of solvent properties in the gastric fluid, which, as a rule is accompanied by intestinal derangements, finally followed by diarrhœa, the remedy here is clearly indicated —pepsin. The precaution should be taken to insure its being combined with the contents of the stomach in a suitable media. The character of pepsin product is a matter of no small moment, and I may call attention here to a comparatively recent preparation, which seems to combine all the desirable features to be found in pepsin. It is styled "Pepsinum Purum in Lamellis," or pure pepsin in scales, and is said to be nearly twice the strength of any pepsin heretofore offered. Of course, a pure pepsin is a misnomer, but there is a possibility that pepsin may be so free from mucus as to be entirely soluble, and in the absence of peptone it will be non-hygroscopic, and therefore not liable to decomposition. All these requirements have been met in the pure pepsin in scales prepared by Parke, Davis & Co.

Intestinal indigestion, manifested by flatulency coming on about two hours after meals, will demand a different method. The necessity for this will be understood when it is recalled that the pancreatic secretion is to the food entering the bowel what the salivary secretion is to the food entering the stomach, and whatever assists salivary secretion will in a like degree lessen the burden thrown upon the pancreatic liquid. Having already demonstrated the value of pancreatin in the conversion of starch, fats, and albuminoids, and the most appropriate time for its administration, it is only necessary to say that, in the class of cases just described, pancreatin is an admirable remedy. For the first few days it may be given both before and two hours after meals. When the liquid pancreatin is given a bitter principle may be added, but when taken in the form of powder, it should be enclosed dry in a capsule. —John Aulde, M. D., in the *American Lancet.*

CONVULSIONS IN CHILDREN.—You will be called upon to treat convulsions in children so often that I cannot do better than devote this lesson to that subject. Convulsions in children look a great deal alike in most cases, but the cause is very different. Some of such cases are from a central nervous origin, but we will pass that kind over to-day, as we find enough to do to speak of the simpler kind of convulsions. First, what are the causes of convulsive attacks in children? In eighty out of a hundred cases it will be seen that it is attached to some indigestion due to an alimentation, which is either too abundant or given too often, or else it is some form of food which is not suitable as yet for the tender digestive organs of the baby. I have known a little wine given without thought to an infant, to cause convulsions; and on another occasion, being called to see a baby in a fit (notwithstanding the denial of the nurse that anything had been given to it), on tickling the throat, and bringing about vomiting, I saw several pieces of chestnut that had been given the child, without thought of doing harm. You must always inquire, also, if the child has been in the habit of having dyspeptic troubles, as predisposition has much to do with these troubles. Also inquire about the intestines; here is a fruitful source of convulsions. Constipation alone has produced them, and the effect of diarrhœa on the nervous system is very well known. Repletion of the intestines will lead to vomiting, so often seen in children's convulsions; and it is sometimes difficult to tell if constipation exists or not, for some children seem to have stools often enough, and yet they do not in reality empty the bowels sufficiently. It is not so often seen that intestinal worms is a cause of convulsions, yet you will meet some cases; and I have seen some supposed cases of epilepsy cured by a simple purgative bringing away the cause of the trouble, which was nothing but a few round or else flat worms (tænia). Look also for foreign bodies in the ear, or nose, also for burns, or even dresses too tight, or a slight pin cut; all these are causes of fits. Again, in males the presence of the testicle compressed above the abdominal ring, it not having come down yet, is sometimes a cause. If there is a hernia, see that the bandage is not too tightly placed on it.

The next group of causes is that relating to acute diseases that may be commencing. I shall not go into all the theories that have been given to explain these nervous accidents that are seen in acute diseases of children, as they are not at all certain, and I shall merely say that some think that there is a circulatory trouble in the brain; others, that there is an alteration in the blood; again others, that the microbes are playing about in the baby's circulation. Be this as it may, a convulsion in a child is often a sign of the commencement of an eruptive fever, such as measles, small-pox, or scarlatina, and erysipelas, or even pneumonia.

There are other causes which you will see at times, such as the intermittent forms of fever that begin in convulsions in children in certain

parts of the country. A slight hæmorrhage will even bring them on, such as a loss of blood by a badly tied cord causing hæmorrhage at the umbilicus. I call to mind here the case of a little baby that I saw, that was born with a tooth, and as it did not seem very solid in the jaw, and interfered with nursing, the doctor took the tooth out, with the result of not being able to stop the bleeding from it, and also of bringing on convulsions. You must be extremely careful in attempting to make even the slightest operation on very young children. Finally, any cerebral congestion may bring on fits in children.

But I must not forget to strongly impress upon you the necessity of noticing the parents; see if there is chronic alcoholism or hysteria in the mother; and do not neglect to find out if the child has been refused something, as anger may be the cause of the convulsions. I called the attention of the late congress at Washington, when I was in America last year, to the fact that an overlooked cause of nervous attacks in children consists in the fact that people nowadays have a bad habit of spoiling the little ones, and making believe that they are grown up already. They dress them like their elders, while permitting them to be educated up to things that are far beyond their age. This is a frequent cause of convulsions. It is rather a curious thing that the convulsions you see in children are always more pronounced on one side than the other. The attack is often preceded by prodromes such as that, it will be noticed that the child will be irritable and its face congested, with its eyes more or less haggard. Then suddenly it will cry out, stiffen, and lose consciousness. The face is now pale but it soon becomes congested, the pupils are narrowed, and the eyes are like in a converging strabismus. The phase of the attack passes in a few seconds. When the face convulsions come on, the tongue is projected, bitten if there are teeth, and the head is thrown back, while the limbs are thrown about in all directions. *Suppression of the urinary function is the rule*, but sometimes a slight quantity of urine is voided, and perhaps some fecal matter. In a minute or two all is over, and the child remains in a semi-stupid state. from which it gradually recovers, and *it then passes a large quantity of urine.* It is rare that only one attack takes place; more often the attacks are renewed, and they may last hours without there being any cerebral lesion. Again, there may be only a partial convulsion in one member, or only the face, and so on.

But how are you to know and distinguish these convulsive attacks from others of the same order, but from different causes? If you are not present during the attack—and that is the rule—it is only by questioning the parents that you can arrive at a diagnosis. If you find out that the child had already a difficulty in walking, or that it has a paresis of one side of the body, then you may suspect cerebral sclerosis; but it is, above all, by the symptoms following such attacks that you can judge best what the exact trouble is. If it is cerebral sclerosis, you will soon see that the convulsion was only an accident that will show the real trouble by other manifestations before long, that will put you on the right road.

How shall you distinguish eclampsia from epilepsy in children? Remember that before the age of four or five there is rarely an epilepsy. But in children over five there is a curious thing noticed in regard to epileptic attacks; that is, that the attacks have a particular mode of coming on. They come every three weeks, or every two weeks, but always at regular periods; and more than any other attack, they come on in the night. One observes hysteria, also, at a later age. They are always from twelve to fifteen. Here the difference is striking between the two. The epileptic child is morose, sullen, its intelligence is dulled, it hardly ever laughs or talks much. What a difference with the hysterical child! It is always on the go, it laughs and cries without any perceptible cause. Even young as it may be, it has all sorts of tales to tell on the others, and they are mostly invented lies, more often than not. There is no sort of regularity in its attacks, they will come on at all hours and all times, from the slightest cause. The attacks are also longer than the epileptic child's attacks, lasting often an hour, or even two.

These convulsive attacks, as a rule, are very often not of a serious nature, except those convulsions that come on at the end of some serious malady, such as the attacks during the whooping-cough, or in croup. Having found the cause, no matter how terrifying the attacks are, you can hope for a rapid and sure cure of almost all convulsions in children.—Professor J. Simon, in the *Physician and Surgeon,* May, 1888.

PHENACETIN.—The latest synthetical candidate for professional favor is para-acet-phenetidine, or phenacetin for short. It is a member of the aromatic series of the carbon compounds, remotely akin to antipyrin (dimethyloxyquinizine), and the twin sister of antifebrin (acetanilide). Like these two overpraised drugs, it seems to be endowed with great antithermic and analgesic powers, and is doubtless destined to play an important *rôle* in the practice and writings of such physicians as have a taste for "seeking and searching out some new thing."

This body was first prepared by DR. O. HINSBERG, of Elberfield, who, with PROFESSOR KAST, has subjected it to careful physiological and chemical study. "Phenacetin is an inodorous and tasteless powder, hardly soluble in water, a little more soluble in glycerin, but easily soluble in hot alcohol; it is insoluble in acids or alkaline liquids. Experiments made as to its solubility in acid chyle (gastric juice) or in pancreatic extract, under conditions of normal bodily temperature, yielded negative results."

DR. G. KOBLER, of Vienna, has submitted the drug to searching study in practice in the wards of the Second Medical Hospital of Vienna, and in an elaborate paper lays before the profession a clear and forcible demonstration of the power of phenacetin to reduce fever promptly, and seemingly without danger to the patient.

The author says: "In healthy persons phenacetin did not produce any ill effects in doses of from 0.5 to 0.7 grams (8 to 12 grains), neither could I observe any influence on the temperature of the body, but in all cases of pyrexia even relatively small doses of 0.3 to 0.4 grams (4 to 7 grains) were never without perceptible antipyretic effects." The drug, in the author's

opinion, is harmless in doses not greater than twenty-six grains *pro die* in fevers, sthenic and asthenic, and HOPPE has ventured to administer it in doses of from sixteen to thirty-two grains, several times a day in cases of neuralgia, wherein he claims for it a slow (one to two hours) but sure relief of pain without ill effect of any kind.

DR. KOBLER has tested the antipyretic virtues of phenacetin in fifty cases. Of these tuberculosis, pneumonia, typhoid fever, morbilli, puerperal fever, pruritus, and pyemia were the principal diseases, and in two cases Bright's disease was an important complication. In none of these, save one, was anything but a pleasant effect noticed, no nausea, vomiting, or symptoms of collapse being manifest. The drug was administered only when the continued high temperature seemed likely to be prejudicial to the patient, that is, in a long-continued temperature of 102° F. to 104° F. The reduction of temperature took place slowly, the maximum effect being produced in from four to six hours; the point being reached, the temperature again rose, and in from eight to ten hours all effects of the drug had passed away. Nocturnal exacerbations in phthisis were delayed, but not prevented, but the rise of temperature was not accompanied by rigors.

The fall of temperature under phenacetin is not usually accompanied by perspiration. When perspiration does occur, there may be a chill with a sudden depression of the temperature curve. In one case of phthisis, wherein a second dose (four and a half grains) had been given before the first had developed its full effect, the patient had, after four hours, chills, profuse sweating, and a temperature of 95° F. This would seem to be the only untoward effect noticed after a very liberal use of the drug in fifty cases of pyrexia. This case aside, it is the author's experience that in repeated small doses phenacetin acts less energetically than when given a single large dose.

"Special attention was paid to the possibility of cyanosis following the fever reduction, but neither cyanosis nor collapse supervened. Even in the ten cases of pneumonia reported (a malady often producing cardialgia) no such effect was registered by phenacetin." The author believes that his observations justify the conclusion that phenacetin has no detrimental influence upon the blood and organs of circulation.

With a majority of the patients a well-pronounced euphoria accompanied the reduction of temperature under phenacetin; they expressed a sense of relief, became affable and cheerful, and asked for nourishment.

The drug exerts no diuretic action, and passes harmlessly out of the body by way of the kidneys. Its presence in the urine may be demonstrated by a red reaction on adding ferric chloride to this fluid. The author thus summarizes his experience:

(1) "Phenacetin is a decided antipyretic. (2) It has no disagreeable or deleterious effects, such as cyanosis or collapse. (3) It produces decided euphoria. (4) It is best given in single doses of from eight to twelve grains, instead of smaller ones repeated every hour or two. (5) The reduction in temperature after such a dose is from two to two and a half degrees centigrade."

The above report is certainly very interesting and, if verified by subsequent clinical experience, phenacetin will take its place among the best agents in the materia medica, and remove the disfavor into which antipyretic therapeusis has fallen under the uncertain and sometimes dangerous performances of antifebrin and antipyrin. It is also gratifying to note that the new drug is not compromised by a patent, and that it comes before the profession under an honest chemical name, abbreviated and pronounceable. It is to be hoped that for a time at least the physician will judiciously keep the name of this drug and its uses to himself, carrying it in wafers, or in tablets in his pocket, from which he will dispense it without the usual popular therapeutic lecture. If this precaution be duly taken, then it is possible it will not, like antipyrin and antifebrin, become a common domestic remedy before science has had time to test its virtues or point out its contra-indications and dangers.—*Am. Pract. and News.*

TREATMENT OF ACUTE RHEUMATISM WITH SALICYLATES.—In an article in the Lancet, April 14, 1888, DR. DONALD W. C. HOOD, physician to the West London Hospital, discusses the treatment of acute rheumatism, with special reference to the use of salicylates. The paper is based upon a study of over two thousand cases of acute sthenic rheumatism occurring in persons of both sexes, and under thirty-six years of age. The author analyzes this large number of cases in order to demonstrate the comparative results in the case of patients treated specifically, that is to say with the salicylates, and those treated on general principles.

With reference to the pain due to joint effusion, DR. HOOD thinks there can be no doubt that in many cases patients treated with salicylates experience a marked and rapid diminution or total cessation of pain, and coincidently with this loss of pain there is frequently an equally rapid fall in temperature. Thus, of seven hundred and twenty-eight patients treated with salicylates, five hundred and eighty-two were free from pain within seven days. In another series of cases, numbering five hundred and fifteen, it was found that three hundred obtained complete relief from pain in three days. Forty per cent. of these, however, relapsed, the word "relapse" not being used unless there had been decided return of joint pain, accompanied by a temperature above 100°, the condition lasting longer than twenty-four hours. This relapse often proved to be more intense in the character of its symptoms than the initial seizure; and pain and stiffness of joints after the fever had subsided seemed to be more general among patients treated specifically than among those treated on general principles.

Taking as a basis of comparison the estimate that from fifty to sixty per cent. of all patients with acute rheumatism are likely to have cardiac complications, DR. HOOD finds that the proportion of patients treated with the salicylates who suffer from heart troubles is slightly over sixty per cent. He therefore concludes, from this analysis, that the salicylates have no effect whatever in reducing, preventing or limiting the intensity of cardiac inflammation occurring during the course of acute rheuma

tism. This conclusion seems entirely just, though some will doubtless think that fifty or sixty per cent. is an over-estimate of the number of persons suffering with rheumatism and treated without the salicylates who suffer from heart complications; and it might even be believed from DR. HOOD'S observations that the effect upon the heart of the use of the salicylates is positively harmful, and not almost negative, as the author states it to be.

DR. HOOD calls attention to the dangerous symptoms which have been found to follow the use of salicylates, especially furious delirium, ushered in by hyperpyrexia. Bearing in mind the fact that the salicylate of soda is capable of producing delirium and hallucinations in persons unaffected with rheumatism, and that rheumatic patients treated with it are peculiarly prone to delirium, the caution which DR. HOOD urges should be used in administering this drug deserves to be carefully heeded.

In conclusion, he states that he does not consider the administration of the salicylates to be advisable in the rheumatism of children, but regards it as more especially indicated in the acute sthenic rheumatism of early adult life. In other and older patients they are best given only as an anodyne, and in combination with a more general and tonic treatment. In the acute rheumatic attacks of late adult life, many of which are very like those of gout, he is disposed to give the salicylates as an anodyne. The remedy, he says, seems to be contra-indicated in cases in which relapse follows relapse. In attacks which have been complicated with one of the severer forms of cardiac or pulmonary inflammation, he thinks the evidence indicates that the use of the salicylates should be discontinued, if they have already been employed.—*Phila. Med. and Surg. Rep.*

THE VALUE OF THE NUTRITIVE BATH AND OF INUNCTION.—In the more chronic bowel disorders, in which the child suffers through a period of several weeks, the whole alimentary tract being implicated, death finally takes place from exhaustion—essentially from starvation; for, no matter how carefully nursed and fed, the nourishment is not appropriated by the system. The blandest food acts rather as an irritant to the inflamed surfaces. The stomach itself, however, if there be no vomiting, is probably still capable of absorbing such material as requires no bowel-digestion. Here the most appropriate aliment is the whey of milk, and the white of egg thoroughly beaten with water to considerable thinness, and lightly salted. These may be given alternately. Milk itself is of doubtful utility in these cases. If not digested, it becomes only a source of irritation.

Gentle friction of the abdomen with some warm, bland oil is extremely useful. The absorbents of the skin are exceedingly active during such wasting diseases, and, if the friction be continued very gently for several minutes at different periods of the day, considerable nourishment may be thus obtained. Some oils are more appropriate than others, from being more readily absorbed.

Following each inunction, great relief is afforded by warm fomentations of camphor. Fold a light linen tissue (as a large handkerchief) three or four thicknesses, of a size to cover the whole abdomen; dip this in water warmer than the hand, wring out the drip, and sprinkling the warm surface lightly with spirits of camphor, apply it quickly to the abdomen. Then cover all with dry flannel under the clothing. The warm, camphorized vapor has a most soothing effect.

There are cases of these disorders in children in which the stomach will retain nothing. Even a teaspoonful of cold water is often rejected. Here it is manifestly impossible to do anything in the way of stomach-feeding, and we must resort to other measures. It is in these cases that *the soup bath* becomes a boon beyond all price. It not only relieves the thirst (which may be accomplished by prolonged immersion in tepid water) but it imparts sufficient nourishment to tide the patient over the critical period. We have known a child's life most evidently saved by this simple means. Let some pieces of mutton or other meat, sufficient for making two or three gallons of good soup, be first simmered for an hour and then boiled sufficiently long to thoroughly soften and extract the juices. In skimming do not take away all the fat. This latter may be skimmed off while cooling and kept warm for inunction later. Pour the soup, when ready, into the little bath-tub, and, when sufficiently cool, immerse the child in it for a period of twenty minutes. It should, of course, have sufficient depth to cover the entire body, the head being supported by the nurse's hand. This should be repeated twice daily, the bath being rewarmed for a second use, and a fresh soup made, if possible each day. Let the bath be followed by inunction of the entire body with the warm fat that was set aside. After two or three days, if the case improve, the stomach will begin to retain light nourishment. In the meantime, the fomentations of camphor may be continued. Attempts at nourishment by the rectum are apt to be futile in these cases, as may be readily seen.—DR. G. E. HOPKINS in *Med. Record.*

A NEW ANTISEPTIC SOAP.—Until quite recently a satisfactory soap containing as an antiseptic one of the salts of mercury has been difficult to prepare on account of the alkaline soap refusing to yield a good lather, oleate of mercury being formed—a compound which has little or no germicidal action. One of the most powerful antiseptics of the mercury salts is, as is well known, the bichloride. Moreover, it is cheap, and easily soluble, but it has the disadvantage of being extremely poisonous and easily reduced by albuminoid matter, with which it combines, thus being rendered inactive. In a paper recently read before the Society of Chemical Industry in Glasgow, by John Thompson, the solubility of the red biniodide of mercury (which is claimed to be even a more powerful antiseptic than the bichloride) in iodide of potassium has been made use of. A soap can thus be easily prepared containing a certain proportion of the biniodide in a soluble form. It is stated to be permanent, having no tendency to separate, and to be more germicidal in its properties than any other antiseptic soap yet known. Experiments were made to demonstrate this. Sterilized silk threads were suspended in a solution of the biniodide soap (one

gramme of soap in 120 cubic centimetres of water) for ten minutes after being saturated with solutions containing well-known micro-organisms, amongst which were streptococcus scarlatinæ (Klein), bacillus subtilis, orange sarcina, white bacillus from Tweed water, organisms from putrid urine, the micrococcus of osteo-myelitis, aspergillus nigrescens, spores from various fungi, yellow micrococcus from pus, putrefactive organisms, bacterium termo, and bacillus scarlatinæ (Edington). The threads were then carefully washed to remove the soap, and placed in sterilized gelatin in the ordinary way. The threads were controlled by first sterilizing, and then plunging into nutrient gelatine; if no growth occurred, they were accepted as being fit for use in the experiment. Washing the threads previously contaminated with organisms two or three times carefully with distilled water was shown by experiment not to remove the organisms, for on being placed in the gelatine growth readily took place. The results, as shown in tables, are very remarkable. In all these experiments, with a few very uncertain exceptions, growth of the organisms was completely prevented, even after the lapse of four days. Similar experiments were made with "carbolate of mercury" soap showed it to be less powerful as a disinfectant, and much slower in its germicidal action. In experiments carried out in the same manner with other antiseptic and ordinary soaps, it was shown that the growth of the organisms in many cases was not prevented. The importance of such a soap in medical and sanitary science is very obvious. The biniodide soap has been used in the treatment of eczema with well-marked success, especially where the irritation is due to the fermentations of accumulated secretions, the fermentation being set up by micro-organisms. It has also met with similar success when used in parasitic skin diseases, such as favus and ringworm. As a parasiticide, too, the importance of its application to patients during the period of desquamation in scarlet fever is evident.—*Lancet*, May 12.

THE UNTOWARD EFFECTS OF SACCHARIN.—The general impression seems to be that saccharin is innocuous, and this impression has doubtless been materially supported by a report made to the Medical Society of Berlin, in April, 1886, by PROFESSOR LEYDEN, and by a sort of a certificate of his, widely distributed by the manufacturers of saccharin, FAHLBERG, LIST, & CO., to the effect that even the prolonged use of the substance gives rise to no inconvenience. In general terms, this has been the experience of most observers, but many of them add that occasionally a case is met with in which saccharin disagrees. DR. STADELMANN, of Heidelberg, has experimented with the product, at the request of the manufacturers, and has reported that, out of eleven persons, from fifteen to thirty-five years old, to whom he gave saccharin in daily quantities of from forty-five to seventy-five grains for two or three weeks at a time, nine experienced no unpleasant effects, while two suffered with nausea, an excessive sensation of weight in the stomach, and loss of appetite.

DR. WORMS has made a communication on the subject to the French Academy of Medicine, an extract from which is given in the "Revue générale de clinique et de thérapeutique." After citing the above-mentioned facts, he gives brief notes of the cases of four diabetics who used saccharin by his advice, all but one of whom were soon compelled to discontinue its use, on account of the occurrence of dyspeptic symptoms—nausea, and sense of weight in the epigastrium, loss of appetite amounting to absolute loathing for food, and in one instance a constant sugary taste in the mouth. Admitting that his observations are not numerous enough to justify much in the way of generalization, he nevertheless thinks it must be admitted that a certain proportion of diabetics can not bear the use of saccharin for sweetening their tea and coffee longer than eight or ten days at a time. Obscure as the problem of diabetes is, the disease comprising innumerable varieties, as regards both the symptoms and the pathogeny, there is, he remarks, one therapeutical rule that must be observed in all cases—that of maintaining the integrity of the digestive functions. It is better for a diabetic that he should excrete a little more sugar and assimilate his food than that he should pass less sugar and still lose ground. Moreover, many diabetics suffer but moderately from foregoing the use of sugar, and it may be said provisionally that they should not be permitted to use saccharin in larger amounts than from three quarters of a grain to a grain and a half daily, and then only so long as it does not give rise to any digestive disturbance. It is usually not until after the substance has been used for from ten to fifteen days that it manifests its evil influence, appearing to accumulate in the system until then.—*N. Y. Med. Jnl.*

VERNONIN, A NEW CARDIAC POISON.—MM. Edouard Heckel and F. Schlagdenhauffen have recently communicated to the Académie des Sciences of Paris some facts in regard to vernonin, a new heart poison obtained from *Vernonia nigritana* (known in Africa as *Batiatior* or *Batjentjor*), the root of which is used on the west coast of Africa as a febrifuge. As yet it has been impossible to obtain an alkaloid from the plant, but the alcoholic extract of the resin contains the glucoside vernonin, a white powder, slightly hygroscopic, the solution of which is pale yellow. It is only slightly soluble in ether or chloroform. The solutions, when evaporated, leave a colorless deposit of resinous appearance, which strikes a brown color with sulphuric acid, this color passing to a violet purple, and persisting for several hours.

According to Heckel and Schlagdenhauffen, when a few centigrams of the aqueous solution of the alcoholic extract are injected under the skin of the frog (in the thigh) paralysis of the limb soon supervenes. When the dose is large enough the heart soon ceases to beat, as after an injection of digitalis, convallaria, or strophanthus, and other vegetable cardiac poisons. A dose of gram 0.02 caused some cardiac trouble in the frog, but they soon disappear. With a dose of gram 0.04 there was at first a slight diminution in the amplitude of the cardiac movements; then, after about five minutes, the beats were twenty-four instead of thirty-three to the minute. In a short time the needle of the cardiograph dragged, and showed only two or three movements a minute. At intervals the arrests were interrupted by distension of

the point of the heart from auricular action. In about forty minutes the heart was completely arrested, the needle tracing a straight line. With a dose of gram 0.09 the same phenomena were observed, and the animal died in about three hours.

Experiments on pigeons showed that gram 0.15 killed the birds in about fifteen hours. The autopsy shows the heart arrests in systole. Gram 0.25 kills a pigeon in about twelve hours.

The experimenters conclude that vernonin is very similar in its action to digitaline, but that its toxicity is twenty-five times less marked than that of digitaline. Contrary to what has been supposed, the root of the plant does not contain emetine.—*Jour. Amer. Med. Assoc'n*, June 16, 1888.

RECTAL MEDICATION FOR CHILDREN.—Jacobi writes that the rectum of the infant and child has been rising in the estimation of the practitioner since the times of thermometry; for it is certainly the safest and easiest place to take the temperature. For therapeutical measures it is also invaluable.

The rectum of the young is straight, the sacrum but little concave, the sphincter ani feeble, and self-control gets developed but gradually. Thus a rectal injection is easily either allowed to flow out or vehemently expelled. Therefore one which is expected to be retained must not irritate. The blandest and mildest is a solution of six or seven parts of chloride of sodium in a thousand parts of water. This may be made to serve as a vehicle of medicine, unless incompatible with the latter, which will be but rare. An enema which is to be retained must be tepid and small in quantity, half an ounce, or little more or less, and carried up well into the rectum, for the immediate contact with the sphincter may produce its expulsion. Care must be taken to exclude air from the syringe, which, for small quantities, must be a well-fitted piston syringe, of hard rubber, with a long nozzle. This must be well oiled, and introduced, not straight, but with a gentle turn, so as to avoid folds in the anal mucous membrane (in the same way a thermometer ought to be introduced). The nozzle must not be too thin, as it is liable to be caught; the smallest nozzles of fountain syringes are, therefore, in most cases improper; the larger size is more appropriate for any age. The injection must be made while the patient is lying on his side, not on his belly, over the lap of the nurse, for in this position the space inside the narrow infantile pelvis is reduced to almost nothing.—*Archives of Pediatrics.*

HYOSCYAMINE IN THE TREATMENT OF THE INSANE.—Dr. W. A. Mc Corn, of the New York City Asylum for the Insane, Ward's Island, writes: "In a recent issue of the Medical Record is noted a fatal result from the use of hyoscyamine in one-twelfth of a grain dose, by Dr. Johnson, of Toronto. I have had considerable experience in the use of the drug, and believe it to be a useful remedy, particularly in the treatment of the insane. A fatal result from hyoscyamine is of extreme rarity, and as yet the first case is to be recorded in this institution, where it is used extensively. It is administered subcutaneously, in doses varying from one twentieth to one-fifth of a grain, Ulrich's amorphous sulphate always being used. It has proved itself to be very efficacious in quieting the motor excitement of acute, chronic, and recurrent mania, and in senile dementia with destructive proclivities; but it is not as good an agent as chloral hydrate in general paralysis of the insane. It is a drug usually considered dangerous by asylum physicians, but unjustly so, as it is much less liable to be attended with unpleasant symptoms than are chloral and the bromides. As is the case with other narcotics, those to whom it is given become gradually habituated to its effect, but it is always well to begin with a small dose, as one-twentieth of a grain, and increase as necessity demands. In all cases that I have seen, where untoward symptoms have manifested themselves, they have yielded readily to the use of stimulants."—*Med. Record*, June 2, '88.

ANOTHER CASE OF APPARENT CURE OF CANCER OF THE STOMACH BY CUNDURANGO.—The readers of the Times will remember the report of the remarkable results obtained by L. Riess in the Berlin Municipal Hospital with cundurango in gastric cancer. In the Neu Yorker Medizinische Presse, for April, Dr. Franz Foerster reports four cases presenting all the symptoms of cancer of the stomach which were treated with this drug. In two cases no favorable effect was noticed; in the third he believes that life was prolonged, while in the fourth case a positive and permanent cure resulted. The diagnosis must, of course, remain somewhat in doubt; but the symptoms and physical signs present were strongly indicative of the disease mentioned. The treatment of gastric cancer is in general so entirely hopeless that any addition to our therapeutic resources, which promises even partial relief from the distressing symptoms, is deserving of a hearty welcome. The testimony of all recent writers upon the subject is to the effect that cundurango is well borne in these cases; that it arrests vomiting, reduces the pain and stimulates digestion. With the added hope of producing a cure, an additional reason is presented to give the remedy a trial. Dr. Foerster used a fluid extract of the drug given in half-drachm doses, with syrup, three times a day.—*Medical Times.*

THE PROPHYLACTIC TREATMENT OF DIPHTHERIA.—My idea of the prophylactic treatment of diphtheria is based upon the belief that the invasion is local before constitutional, and that both locally and constitutionally we are able to inhibit the development of the microphyte or restrain it. I believe that several substances will do this, but my plan has been this: Let a case just have developed and taking the age of 12 as a basis, I would use the following treatment: *Two grains of quinine* given each morning so that the solution gets on the throat; *then two drops of tinct. ferri chloridi with two grains of potassium chlorate dissolved* in it and just enough water for swallowing, given every three hours. Give it also the last thing on going to bed and on awakening. When I see a case in a family after it has been progressing so that *exposure* to the *contagion has been longer*,

I give somewhat larger doses every two hours and the quinine morning and night. I would be exceedingly glad if you could induce a half dozen others to do this, taking careful note as to whether all the family has been exposed before one case in the family occurred, and if not, how long after the first case began, the prophylactic treatment was begun. My judgment rests upon a good many cases and repeated trials.—E. M. Hunt, M. D., in *Brooklyn Medical Journal.*

DIABETES MELLITUS AND ITS TREATMENT.—Dr. B. Hofmeister, of Carlsbad, in a most able article in the British Medical Journal, May 5, says of this disease:

"In conclusion, I venture to lay down the following propositions, as summing up the results of my studies and observations:

"1. We are still in total ignorance of the etiology of diabetes mellitus.

"2. The quantity of sugar found in the urine is of no significance at all in judging of the severity and danger of any particular case of diabetes.

"3. The smallest traces of sugar, found only by most careful chemical examination of the urine, are of considerable importance in a great many cases, so they cannot be left out of account in trying to arrive at a correct diagnosis and prognosis.

"4. The dietetic treatment must be adapted to the special requirements of each case, as there are cases in which, without regard to the amount of sugar excreted, complete abstention from starchy matters is not only useless, but directly injurious.

"5. According to the present knowledge, strict antidiabetic diet, combined with the use of the mineral waters of Carlsbad, is the best method of treating diabetes mellitus.—*Med. Register.*

THE TOXIC SYMPTOMS OF STROPHANTHUS.—On May 22, 1888, I was called to see a female child of five summers, who had thirty minutes previously been given by mistake of the mother twenty drops of the tincture of strophanthus hispidus.

The face was flushed, lips scarlet, eyes brilliant, elevated temperature, skin dry, tongue normal. Pupils quivering, dilating and contracting alternating every few seconds; pulse 140; arteries distended; left ventricle contracting with unusual vigor; aortic valves closing with a loud and distinct "tup;" a slight mitral regurgitant murmur; intellect clear. The child was precociously loquacious during the five hours in which the toxic symptoms were apparent.

The treatment was half-dram-doses of fluid extract of ipecac with copious drinks of warm water, repeated every ten minutes until the child had vomited five times, then followed with a half drop of tincture of aconite and one drop of the ipecac every half hour until the skin moistened and the pulse became normal. No urine was passed for ten hours after taking the drug.—Horace Y. Evans, in the *Med. News*, June 16, 1888.

SULPHONAL.—After seeing the articles upon the new hypnotic "sulphonal," on April 21st, I obtained a supply of the drug. I did not find that it was soluble in eighteen or twenty parts of boiling water. It required considerable more, and immediately on cooling it crystallized out; neither did I find it soluble in 100 parts of water at the ordinary temperature.

Its effect upon patients was very discouraging. For several hours after taking the drug no appreciable effect could be observed, but during the greater part of the following day there was extreme drowsiness, also considerable cyanosis. The price is 16s. per ounce.

The best mode of administering sulphonal is to mix with pulv. tragacanth co. and water.—*British Medical Journal*, *May* 28, 1888.

CASCARA SAGRADA.—Dr. L. L. Clement writes: If I had to use one remedy to the exclusion of all others, I should use cascara sagrada. When there is accumulation of gas and the food is causing distress, lying in the stomach rotting, if you will give a few drops of the fluid extract, it causes eructation of gas, starts the stomach to action, and the patient experiences relief in most cases, and will not do without the remedy after giving it a fair trial. A sufficient quantity of the fluid extract causes a natural evacuation of the bowels; and in small doses it seems to have a soothing effect on the mucous membrane of the stomach.—*So. Med. Record*, June, 1888.

PICHI IN AFFECTIONS OF THE URINARY PASSAGES.—In a paper on the use of pichi in urinary derangements, Journal de Medecine, April 22, Dr. Le Menant des Chesnais is lavish in his praise of that drug. Two cases are cited, the histories of which clearly show the great benefit derived from a resort to its timely assistance. Both were cases of cystitis with purulent ammoniacal urine, almost constant desire to urinate, depletion, etc., all of which symptoms were rapidly dissipated by the employment of pichi, although, in each, all approved plans of treatment had previously been tried.—*Weekly Med. Review.*

ANTIDOTES TO COCAINE.—Dr. Mattison, in a paper published in the Amer. Prac. and News, upon Cocaine Toxemia, gives a final as follows:

There is a lethal dose of cocaine.

This dose is uncertain.

Toxic effects are not rare.

They may be sequence of doses large or small, in patients old or young, the feeble or the strong.

This risk should induce caution.

Antidotes should be at command.

These are nitrite of amyl and hypodermic morphine.—*Ind. Med. Jour.*, May, 88.

HOT SALINE INJECTIONS TO PREVENT SHOCK.—Dr. W. GILL WYLIE, of New York, in a paper before the New York State Medical Society, announced it as his intention hereafter to give large, eight to ten-ounce, hot saline enemata during and immediately after laparotomy or surgical operations, to prevent shock, and to take the place of transfusion whenever loss of blood indicates their use. He has tested this treatment in two formidable cases with satisfactory results.—*Amer. Prac. and News*, *May* 12, 1888.

The Medical Age.

Vol. VI. DETROIT, JULY 10, 1888. No. 13.

Original Articles.

SOME POINTS RELATING TO "EMMET'S OPERATION," WITH A DESCRIPTION OF A NEW CERVICAL NEEDLE.

BY EDWARD W. JENKS, M. D., DETROIT, MICH.

The surgical operation for laceration of the cervix uteri which, in justice to the distinguished gynecologist who devised it, is designated as "Emmet's operation," has had very many pages written concerning it, and many instruments have been manufactured for the ostensible purpose of simplifying it.

Every one who has made many of Emmet's operations and has used ordinary surgical needles for putting in sutures, has, doubtless, occasionally observed that the task is not always an easy one. It is generally owing to the firmness of the tissue of the uterine neck that the passage of needles is rendered difficult. If an ordinary surgical needle, or one of the many so-called uterine needles, is used with a holder, it is not an uncommon occurrence for the needle to break, or if this does not occur it is often no easy task to insert it in the exact locality the operator desires. It must be that many operators have found this particular part of Emmet's operation somewhat difficult, for if it were otherwise there would exist no *raison d'être* for the many devices for this purpose that are offered for sale by surgical-instrument dealers.

In thus alluding to the insertion of sutures in Emmet's operation, I do not wish to be understood as asserting that all operators find it to be a difficult task, but that many do I believe cannot be denied. What may be an easy matter for one who has performed hundreds of operations may be the reverse on the part of some one else who has made less than a dozen of the same kind. What the distinguished gynecologist who devised the operation bearing his name can do with perfect ease, may be a laborious task for others.

As Emmet's operation is made by general practitioners, to a very great extent, whatever conduces to simplifying it is of general professional interest. Owing to the liability of ordinary needles getting out of position when held by needle forceps, and the difficulty of placing sutures in the exact locality the operator desires, very many needles of various patterns have been devised by ingenious surgeons having in view an avoidance of the difficulties alluded to.

One of the objections to many of the needles that have been manufactured for use in Emmet's operation, is that they make too large an orifice in the tissues. This is the case with the hollow needles that seem to be quite popular with many surgeons. The objection to needles that are much larger than the sutures which follow them is that cicatricial tissue is liable to form in their track. Now, as one of the chief objects of the operation is to get rid of cicatricial tissue, nothing should be done in the operation to cause more to be formed. It has been my habit, until quite recently, to use Emmet's or Sims' uterine needles, although when the material of the suture was silk I have used with satisfaction the needle invented by my friend DR. A. REEVES JACKSON, of Chicago, I have, however, thought that a needle of some kind would sooner or later be devised by some one that would prove more generally satisfactory to me than any I have alluded to. About a year ago I first begun to use the Hagedorn needles in other operations and concluded that a needle in a fixed handle, having the Hagedorn point and constructed on the same general principle, would prove to be the one I wished for in "Emmet's operation." Therefore I had several patters made for me by Messrs. Tiemann & Co., of New York, all of which I tried from time to time. The adjoined cut will show the form which I have fixed upon as the most desirable. I have had made two needles, which may be designated as right and left, as the curves are in opposite directions. It is somewhat difficult to show the exact curvature of the needles with handles, but that portion of the cut which represents the needle proper detached from the shank and handle, shows it fairly well, but yet not perfectly. I have given these needles a fair trial during the past six months, and they have been used by some of my friends with much satisfaction. I have purposely refrained from publishing anything relating to their merits until it could be proven by trial that they possessed some.

The advantages of the Hagedorn needles in general surgery have been known to the profession for two or three years, and therefore it is needless to dwell upon them here. The needles which I have desired for operation upon the cervix uteri, have eyes near their points, as can be seen by reference to the accompanying cut, thus differing from the Hagedorn needles

It will greatly facilitate an operation upon the neck of the uterus if the operator, instead of attempting to put the permanent sutures in position by means of the eyes, will first put a loop of small but strong silk in the eye of each needle. He will then be enabled to use silver wire, silk, silk worm gut, or sutures of any material for which he has a preference.

The advantages which these needles are believed to possess may be summed up as follows:

1st. They are inserted with such ease that there is no difficulty in putting sutures exactly where the operator desires.

2d. The incisions made by the needles is at right angles to the vivified edges, and therefore the direction of the incisions is in the same line as the traction of the sutures, and after the latter are secured there is no gaping of the needle holes, as is usually seen when other needles are employed.

3d. The needles being flat with cutting points, they cause less injury than the large round needles quite commonly used, and they afford no opportunity for the formation of scar tissue along their route.

4th. The two needles with curvatures in opposite directions are of special value when operating on both sides of the uterine neck.

Although foreign to the subject in hand, I cannot refrain from expressing certain views relating to Emmet's operation, which I have entertained for some time. It has been substantially stated by many that an operation for laceration of the cervix uteri "is a very simple thing to do;" "anybody can do it;" "all that is necessary is to freshen the edges and bring them together by sutures of some kind," etc., etc. With such views prevailing to any extent, there must be many operations made without beneficial results. I am of the opinion, after making upwards of three hundred Emmet's operations, that a thoroughly "good" is not the "simple," "easy" task it has been designated. Unless the cicatricial tissue and connective tissue growths are removed at the time of the operation, the patient will derive no special benefit.

In conversation, in Sept., 1887, with several gynecologists of large experience, I found existing among them perfect unanimity of opinion on this point, and that it had grown upon them with increased experience.

Simply securing union where laceration has heretofore existed, comprises only a small portion of a properly-performed "Emmet's operation."

ST. MARY'S HOSPITAL SURGICAL CASES.

SERVICE OF H. O. WALKER, M. D.*

TWO CASES OF TREPHINING THE SKULL.

CASE 1.—Ambrose McNamara, aged 11 years, entered St. Mary's Hospital, Feb. 18, 1888, with the following history: On the afternoon of February 16, he fell from a building, a distance of twenty feet, striking upon his head. He was unconscious for about half an hour; during the night he vomited frequently small quantities of blood.

February 17. Was delirious at times, complaining of severe pain in his head, and during the night he lost the power of speech.

February 18. His symptoms growing worse, his physician, DR. J. F. ENCKE, directed that he be sent to the hospital, where I first saw him. At this time there was hemispasm of the left arm, and turning of the eyes to the left. He would start suddenly when spoken to, and attempt to get out of bed. He had full control of his bladder, but had no movement from the bowels since the accident. One drop of croton oil, however, acted quickly, producing free catharsis. The pulse was 80, and temperature 100.5°; pupils contracted, but responded to light. The entire scalp was greatly swollen, and pitted on pressure. The point of greatest sensibility seemed to be just above the right ear, yet it was impossible to detect either fracture or depression of the skull. The head was shaved, washed and an antiseptic cap applied, together with an ice bag.

February 19. Passed a restless night, although full doses of bromide of potassium and chloral hydrate had been given. Hemispasm with hemiplegia of left arm and leg was now complete; pulse, 90; temperature, 102°; vision incomplete, and complete aphasia.

At 4 P. M., assisted by DRS. J. F. ENCKE, W. E. CLARK and several medical students, I made a curved incision, with concavity towards parietal eminence. I found, however, that to expose the depression and extent of fracture, it was necessary to extend my incision downwards. Reflecting back the periosteum, it was discovered that the fracture extended vertically from just above the external meatus to the parietal eminence, and transversely through the whole width of the squamous portion of temporal bone. There was a marked depression in front of the vertical fracture. Removing two half buttons with the trephine, and chiseling off the projecting bone, I succeeded with the elevator in

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lifting up the area of depression. The dura mater was deeply injected, and under it could be seen considerable coagulum. This was removed by cutting through the dura mater and irrigating with mercuric bichloride 1-1000. Hemorrhage was slight, and easily controlled. The wound was closed with continuous catgut suture. Several strands of No. 4 catgut were used as a means of drainage, extending from within the dura mater out, and the whole was covered with a thick bichloride gauze cap.

February 20. Pulse, 80; temperature, 99.8°. Has passed a comfortable night. I renewed the dressing, as there had been considerable oozing.

February 21. During the last twenty-four hours the patient has had two slight convulsions; pulse, 86; temperature, 99 5°. Spasm of the arm disappearing, with evidence of movement in the arm and leg.

February 23. Has been gaining gradually for the last two days; asks for a drink, and constantly (when not asleep) crying for something to eat.

February 27. Is able to sit up in bed; temperature normal. There is a marked improvement in speech and motion of the arm and leg.

March 2. Not so well. Temperature 90.5°. Eats and sleeps well, however. Ordered wound redressed.

March 6. After redressing of wound the temperature fell to normal, and has remained so ever since. He is now able to walk about the ward.

March 9. At the earnest solicitation of parents was allowed to go home. Wound nearly healed. At the present writing, he has been going to school for two weeks, and appears before you in perfect health.

Case 2.—T. Byerenski, Pole, aged 32 years; in June of 1887 was struck on the left parietal eminence with the end of a wagon-tongue. The blow caused unconsciousness for upwards of half an hour. He made a good recovery, but in October had a fit lasting for ten minutes. Since that time he has had several attacks—over a dozen in number—the last one on February 14, 1888. These attacks as described by the patient and his friends, were without doubt epileptiform in character. He gave no history oi epilepsy previous to the injury, hereditary or otherwise, and was always in good health.

He entered St. Mary's Hospital, February 19, and was prepared ior the operation as in the previous case. At the seat of injury there was a circular depression three-quarters of an inch in diameter and one-fifth of an inch in depth.

February 22, made circular incision as indicated by line, and reflected periosteum. First button removed was directly over the center of the depression; finding that there still existed above a portion of depressed bone, I removed a three-quarter inch disk of bone. The wound was drained and dressed as in the preceding case.

February 23. Dressing removed on account of oozing. Temperature normal.

The case progressed favorably, and the patient was discharged from the hospital, March 16, with the wound entirely healed. He is now back at his former work, and has not had the slightest symptoms of a convulsion since the operation.

The importance of surgical interference in lesions of the brain is conceded by the representative surgeons of the world, and case 1 was also somewhat obscure, although we had the history of a fall, yet it could not be made out whether the symptoms of compression were due to fracture or hemorrhage, or both. Here we were largely guided by cerebral localization. I forgot to mention in the report of this case that the patient is left-handed, which will account for the aphasia, as aphasia in left-handed persons is due to the lesions upon right side of the brain.

Trephining for traumatic epilepsy has been robbed of its terrors since the introduction of antiseptic surgery, thereby justifying an operation when any depression of the skull can be traced as the direct cause of this terrible malady, for if relief or a cure is not effected the danger is *nil*.

Case 2, as has already been stated, has had no return of fits, yet the permanency of relief can only be determined by further time.

Effective operations for the relief of brain lesions require: *First*, A thorough knowledge of cerebral localization, the detains of which can be found in an article by Horsley, entitled, "A note on the means of topographical diagnosis of focal diseases affecting the so-called motor region of the cerebral cortex." They may also be found in an article by Seguin, in Pepper's "System of Medicine," vol. v, p. 94. *Second*, A thorough knowledge and appreciation of antisepsis, together with efficient drainage.

TWO CASES OF STRICTURE OF THE URETHRA.

Case 1.—J. M., aged 36, entered St. Mary's Hospital Feb. 28 for the relief of difficulty in passing urine. Eight years ago he had gonorrhœa from which he had never recovered. His general health is not good. Micturition is frequent, as often as every fifteen minutes to an hour. Examination of the urine indicated large quantities of pus and bladder epithelium. The urethra was contracted its entire length, ranging in size from a filiform bougie to 10 m. Feb. 29th, after directing the night before the parts to be thoroughly shaved, washed and enveloped in antiseptic bandages, I operated,

first introducing a whalebone guide, then over it a tunneled dilating urethrotome (Fig. 5) which I had made for me by Tiemann & Co

FIG. 5.

The instrument consists of parallel steel bars, the lower being segmented at a point where the curve begins, and held together by bars which can be separated or closed by means of a button-screw at the end. In the upper bar is a groove into which the knife glides, and when not in use is concealed by a small half bulb opposite the commencement of the curve. The distal end of the instrument is tunneled, measuring two millimetres in diameter. By means of this instrument, when a guide has been once introduced, we are able to cut a way through by just pushing the knife forward from its concealment in the bulb, and when it is once passed beyond the point of constriction, the bars are separated by the button screw, dilating the urethra to the extent desired, that to be determined by the indicator, when the knife is drawn from behind forward, and the cicatricial tissue divided. It will be seen that the instrument combines the properties of a tunneled sound, a dilator, and a urethrotome.

After dividing the strictured tissue, a lithotomy staff was introduced and the perineal section made. Then thoroughly irrigating the urethra and bladder with mercuric bichloride solution, 1 to 10,000, I covered the perineum and scrotum with several thicknesses of bichloride gauze. At 6 P. M. he had a urethral chill after urinating, followed by a temperature of 102°, this quickly subsided and he made a good recovery, leaving the hospital March 13th. The after-treatment consisted in the introduction of a full-sized sound at intervals of every 2 or 3 days.

CASE 2.—W., aged 21, entered hospital March 24th, with the following history: When three or four years old, he received a severe injury in the perineum, which caused the passage of blood and necessitated the use of a catheter for several months. About a year ago he contracted gonorrhœa which has remained with him ever since. Previous to his entering the hospital I tried electrolysis several times without benefit. For several days he has had difficulty in voiding his urine, so much that filiform bougies were introduced and allowed to remain and in this way the urine dribbled away. His condition is good, and examination of urine does not reveal any lesion of the kidney. Exploration of the urethra revealed at the penoscrotal fold a structure that firmly grasped a filiform bougie; the remainder of the pendulous urethra was more or less strictured.

In this case the operation was made by first applying a solution (20 per cent.) of muriate cocaine to the urethra, and then introducing a filiform bougie and over it the urethrotome, dilating and cutting so as to admit a No. 18 English sound, the normal calibre of the urethra. The hemorrhage was slight. The whole course of the cut was thoroughly irrigated with the mercuric bichloride solution. The operation was made at 11 A. M. He afterwards ate a good dinner and smoked a cigar or two. At 3:30 P. M. got up and urinated, passing some blood, staggered back to bed in a fainting condition, when a violent chill sat in, followed by rise of temperature to 102°, pulse 140. He became delirious and gradually grew worse, and died at 11:30 P. M., although all known agencies were resorted to, such as hypodermic injections of whisky, digitalis and the cold pack, together with full doses of quinine.

A calamity such as described (fortunately) rarely comes to the surgeon, the first in my experience in several hundred operations for the relief of stricture of the urethra. I had no opportunity of making a post-mortem examination. In my opinion the cause of death (directly) was the passing of the urine over the cut surfaces, producing shock, followed by renal congestion and uremic coma.

GONORRHŒAL PERITONITIS.

BY J. E. CLARK, M. D., PROF. CHEMISTRY AND PHYSICS, DETROIT COLLEGE OF MEDICINE.

In contemplating the various penalties inflicted upon the human race for violations, misconceptions and misinterpretations of Nature's laws, one cannot but be struck with the great variety of complications which may arise from a simple contact with a microscopic speck of gonorrhœal virus. In but few diseases do we find such a diversity of sequelæ, and in none is the difficulty of tracing effect to cause greater. SCHWARTZ (Centrabl. für gynæcologie) considers that gonorrhœa is not only one of the most frequent but also one of the most important diseases—incidentally voicing the belief that it is never cured in woman.

DR. GOODELL, of Philadelphia, if reported

correctly, asserts that a woman who has once had a gonorrhœa is afterwards sterile, incapable of having children, and to those who believe that the vaginal and uterine discharges are death to spermatozoa the theory of DR. SCHWARTZ presents a consistent base from which to advance a rational belief in support of DR. GOODELL.

Fortunately, however, the conclusion of DR. GOODELL, logical though it may be, is not borne out by experience, and women go on as of yore, contracting gonorrhœas, bearing children and, I am firmly of the belief, conceiving during the progress of the sequelæ and even after the more acute symptoms of a gonorrhœa subside. I have attended two cases of gonorrhœa in women, both newly married, and was positive my diagnosis was correct.

I treated the husbands for same disease before marriage, and attended the accouchement of one eleven months and one sixteen months after. The husband of the one whose parturition occurred sixteen months after marriage, had a discharge resembling gleet for some time after impregnation must have taken place, and the question very naturally presents itself, can a person suffering from gonorrhœa or gleet impregnate a healthy woman.

This opens quite an interesting field for investigation and suggests pertinent inquiries:

1st. Is gonorrhœal virus fatal to spermatozoa?

2d. Is the gleety secretion identical with that of gonorrhœa?

An opportunity offered to obtain some sperm from a man suffering from gonorrhœa in a rather subacute stage, and a microscopic examination showed the majority of the spermatozoa in a moribund condition; many were dead, and those living were evidently in a state of "innocuous desuetude." From the extreme enervation exhibited by the comparatively few living sperm, I feel that I am justified in assuming that in acute gonorrhœa the discharges are fatal to sperm viability. I regret it has been impossible so far to obtain sperm for examination from an acute active inflammatory clap, so I am not prepared to give my experience on this point.

A mixture of these two secretions, however, on a microscope slide, under the most favorable conditions of temperature for sperm vitality, showed a complete collapse of every germ. The converse of this is true; in cases of gleet which I have examined, I have found living sperm in abundance. In the seminal discharge from a gleety patient, experiments conducted on a microscope slide, similar to those before mentioned—but with the gleety discharge—did not show the vitality of the zoosperms to be seriously affected.

If these experiments prove anything it must be admitted that they show a distinction between the two discharges, whatever it may be, and that they are not identical, besides showing the possibilty of impregnation where the male is suffering from a chronic gonorrhœa. Another interesting question arises just here: If the two discharges differ so much in their toxic properties upon sperm, why is it that the gleety discharge (minus the gonococcus) is so often productive of acute gonorrhœa.

If good authorities are to be believed, "any non-gonorrhœal discharge from the female may be the cause of gonorrhœa in the male." RICORD believed that a man could "give himself the clap." His recipe for catching it is unique in its way. "Take her out to drive, begin with oysters and continue with asparagus; drink freely and often. White wine, champagne, coffee, liquors, all are good. Dance after supper, and make her dance too. Heat yourself well, and drink beer freely during the evening. When night comes conduct yourself valiantly; two or three times are not too much, and more is better. In the morning do not forget to take a prolonged hot bath, and by no means neglect to take an injection. This programme conscientiously carried out, if you do not have the clap some deity has protected you."*

If this assumption be correct, the theory of a specific poison is upset, and an answer to our question is afforded, and NEISSER'S specific gonococcus is a myth.

We have the best authority for believing that most syphilographers hold that we have no absolute proof that a specific contagion is the cause of a gonorrhœa.† Observers have found the *micrococcus gonorrhœa* in pus from acute abscesses, and in normal human saliva. "DE AMICIS ‡ has produced a urethritis with injections of ammonia, and found micrococci identical with those found in cases with a clear history of contagion."

If these be facts, we need no better explanation of the almost futile attempts to cure disease by the anti-parasitic, germicidal agents so ridiculously inadequate and so much in vogue by the adherents of the gonococci theory.

I accepted at first the parasitic theory and adapted my treatment to conform to it, but, after years of experience, began with conviction and continued with doubt, I have at last abandoned it in despair, and now cure my patients with greater celerity, and more satisfactorily, with the old saline, balsam and astringent treatment. The result is to be regretted. Germicidal medication seemed like a step forward in gonorrhœal therapeutics, but good results, not theories, are of paramount importance to the genito-urinary physician, and where the two are opposed it will not be the results which are relegated to obscurity.

But to return to a consideration of some of

* Ref. Handbok of Med. Sciences.
† Wiener Klinik.
‡ Ref. Handbook, Med. Sciences.

the sequelæ of gonorrhœa. My lot has been cast in a portion of the city where to obtain an innoculation of the pure, unadulterated virus is a matter of extreme facility, and as a result of this fact the opportunities to study the complications in all their protean diversity is unrivalled. I wish, however, to call attention to an affection, the cause of which, I believe, is often overlooked, or attributed to some other condition. I refer to gonorrhœal peritonitis, which I believe to be a much more frequent concomitant of this disease than it is credited with, especially among women.

I have frequently been unable to account for cases arising in my practice, their origin was so obscure and history so unsatisfactory. That it was the acute variety I was satisfied, but no history of trauma or other complications to account for it could be obtained. I have had the fever, the pain, tenderness, tympanitis, vomiting, prostration, in fact every symptom to treat, while the cause has remained as obscure as the pathology of angina pectoris.

Some eighteen months ago I was called to a woman suffering from an acute attack of gonorrhœa, the result of a "Happy New Year" on the part of the husband. I treated her *secundum artem* and was pleased to find success crowning my efforts. In just six weeks, however, I had a characteristic case of peritonitis on hand, which, to my surprise, the patient—a very intelligent women—herself attributed to the "nasty disease she had suffered from." She said she knew it, because she had felt "a hot streak up the groin." After a careful consideration of the case I was compelled to agree with my patient, notwithstanding the assertions of such men as STURGIS and BUECHLER (Universal Med. Sciences) that gonorrhœa never produces peritonitis. HEBRA, RICORD and FOURNIER report peritonitis after inflammation of the cord, and RICORD, as a result of prostatitis. Since this time I have met with two other cases, both in females, one of whom I treated myself for clap, the other the diagnosis was obtained, first, by exclusion and afterwards confirmed by the patient.

In conclusion let me advise against accepting the term "idiopathic" as satisfactory in the explanation of obscure cases of peritonitis, at least not until after a searching inquiry has been made into venereal secrets, which I am assured will furnish valuable clues to elucidate otherwise obscure causes.

18 John R. St.

THE PAST YEAR'S WORK ON PHYSIOLOGY AND HISTOLOGY HAVING A PATHOLOGICAL OR CLINICAL BEARING.

BY DR. H. M'CALLUM, LONDON.*

Let us consider the subjects under the following heads:

1. *Respiratory Physiology.*—In this field, two facts can be considered worthy of our attention, *i. e.*, certain experiments on the pleura and Von Fleische's theory of the heart-beat aiding the oxidation of the blood. A certain London physician (New York Medical Record), in experimenting on a large number of living dogs by opening the pleural cavity, found that collapse of the corresponding lung occurred in a very small percentage of cases. But if the dog were dead for any length of time before the operation, the corresponding lung invariably collapsed. He offers the following explanation that the pleural secretion has the power of keeping the pleural surfaces in apposition during life. Our former teaching in physiology has done much to retard the surgical treatment of the disease of the pleuræ, by warning the student and surgeon that opening this cavity would be followed by collapse of the lung.

With regard to the heart-beat aiding the oxidation of the blood, Professor Von Fleische, of Vienna, has lately advanced the theory that the jar given by the heart to the blood is an important factor in freeing the latter of carbon dioxide. He bases this theory on the law of physics. That a fluid holding a gas in solution, or weak chemical combination having suction applied to its surface, will very readily give off its gas if it be subjected to a smart blow. This would lead one to believe that blows to the chest in a feeble heart, would aid in the elimination of carbonic dioxide.

2. *Cardiac Physiology.*—Much work has been done in America by MILLS, of Montreal, and Martin of Baltimore, in this department. MILLS' paper, read before the Canada Medical Association, on a plea for a better cardiac pathology, did not receive the credit it deserved. DA COSTA'S recent discovery in pathological anatomy of a nervous origin to the heart complications in Bright's disease was well foretold by MILLS in this paper. PROF. H. NEWELL MARTIN, of Baltimore has demonstrated by carefully conducted experiments on the coronary arteries of the heart, that they fill by blood-pressure alone, and their pulsation is simultaneous with that of the carotid. It must follow, therefore, that in diseases of the aortic valves, whilst good blood-pressure is being maintained, there can be no degenerative changes in the heart muscle unless the coronary arteries are themselves affected.

GASKELL (Jour. Physio. Vol. VII., p. 451,) makes some interesting investigations into the electrical changes of a quiescent cardiac muscle. He maintains that all tissues are supplied by two sorts of nerves, which he named anabolic and catabolic. The function of the first is inhibition, of the second contraction. These ideas he attempts to confirm by vagus stimula-

* Read at the meeting of the Ontario Medical Association, 1888.

tion. Stimulation of the vagus in the neck of an animal provokes a positive variation in the muscle of the auricle; while contraction of the same muscle is accompanied by negative (electrical) variation. By using a small dose of atropine in a partly detached portion of auricle (heart of a tortoise), paralyzing the inhibitory action, and operating during repose, the positive variation was prevented when the nerve was stimulated. By the anabolic process, GASKELL means that the muscle fibre is undergoing nutrition, and that while so doing it is incapable of work. Inhibition means, therefore, storage of nutrition in the muscle fibre, while contraction or catabolism breaks down the products of nutrition. Inhibition of the heart, being a nutritive process, would not frequent electrical stimulation of the vagus be proper treatment for degenerative changes in the heart muscle?

3. *Digestion.*—Bacteria, in relation to digestion, have been receiving a goodly share of attention. PASTEUR published in August last, his researches (L'Union Médicale, Aug. 1887,) on seventeen kinds of bacteria (found in the mouth), on articles of diet. Seven dissolved albumin, ten fibrin, six casein and seven partly converted sugar into alcohol. PASTEUR'S conclusions were that many micro-organisms were useful in digestion. But these conclusions stop short of the truth. True enough, bacteria convert proteids into soluble material, but this material will not only fail to nourish, but in many cases will act as an irritant poison to the tissues. These toxic products of mycology are now known by the name of ptomaines. Since PASTEUR found and cultivated six of these bacteria from the fecal matter, there can be little doubt that ptomaines are generated in a healthy intestinal canal, though more freely in catarrhal condition. How, then, is a toxic condition prevented in a normal body? ROGER, of Paris (Gazette des Hopitaux, 1887), has proved that ptomaines and medical alkaloids are destroyed to a great extent in the liver; so much so that the latter are twice as potent given subcutaneously as by the portal vein. ROGERS brought forward facts to prove it was the glycogen which exercises this protective function. The liver is not the only organ said to possess antitoxic function. MC NUM (Brit. Med. Jour. Jan. 1888), works up a claim for the suprarenal capsules. German physiologists have been advancing a similar claim for the thyroid gland.

LAUDER BRUNTON (disorders of digestion), has a peculiar explanation for the bitterness of bile (which he asserts is not always bitter), *i. e.*, it is bitter by virtue of the ptomaines it contains (all cadaveric alkaloids being bitter). He goes further, and asserts that all symptoms of jaundice are due to the ptomaines in the absorbed bile. This, if true, and there is good reason to believe it so, would throw light on many a clinical feature in liver disorders.

Another matter of clinical interest is LAGENDORFF'S studies on sugar formation in the liver (Archiv. für Physiologie, 1886). It is well known that strychnine and curare produce, when administered to animals, artificial diabetes. LAGENDORFF found this to be the action of these therapeutic reagents on a nervous centre. For, when the spinal cord was destroyed about the fourth dorsal vertebra in frogs these drugs fail to produce diabetes. If this region were intact, but the other parts of the nervous system destroyed, strychnine operated in producing diabetes. This points to a nerve centre which calls the liver cells into activity, or produces vaso-dilation of the liver capillaries. This is not all; for the production of diabetes by strychnine the presence of the liver is necessary, while curare will act without its presence, and the amount of sugar excreted is as great when the liver is removed, as when it is present.

Before leaving the subject of digestion, I would like to draw attention to BUNGE'S views on the assimilation of iron (Zeitschreift für Phys. Chemie, 1885). He found an albuminate of iron in the yolk of eggs, milk, etc., which was very stable, only strong chemical agents setting the iron free. Sulphuretted hydrogen and sulphide of ammonia separate the iron as an oxide in a couple of hours at body heat. He named this albumin Hæmatogin, believing that it gives rise to hæmoglobin of the blood. Working on this line, BUNGE assumes that in anæmia this albumin is decomposed—the iron being converted into an inorganic compound which cannot as such be assimilated by the system. Putrescent changes in the food stuffs, in catarrhal conditions, effect this decomposition by generating sulphuretted hydrogen, etc. BUNGE considers that iron administered in anæmia is not absorbed and assimilated, but combines with sulph. hydrogen, etc., etc., and so protects hæmatogin of the food from decomposition. He finds a proof in the good effect of intestinal antiseptics in anæmia.

In regard to the occurrence of iron in the body, ZALEWSKI'S experiments are of importance (Zeitschreift für Physi. Chemie, 1887). He isolated the combinations of iron occurring in the liver, and found that the combinations could be put under two classes: one, the organic, which occurs in very small quantities in the liver cells themselves, and easily detectable; the other in which the iron is held in very strong combination, and needs powerful reagents to separate it. The latter compounds were obtained from the nucleus, and presented all the characters of the nuclein class of compounds. These experiments of ZALEWSKI raise the question whether iron is not present in the nucleus of every living cell. Its presence in

the nucleus, and its combination with nuclein which has been so well termed the "ground substance of life," points strongly to the view that iron is absolutely essential to the life processes of the cells. The old view was, that iron entered into combination with Hæmoglobin only in the economy. At the present time researches show that Hæmoglobin is a degradation product of a constituent of the nucleus holding iron in combination. The tendency of research has been to show that iron does not enter the body in the form of ordinary salts, but in combination with such complex proteids as nuclein, and that only vegetable protoplasm is capable of effecting a combination between albumin and iron.

4. *Blood.*—GAGLIO (Arch. für Anat. and Phys., 1886,) established the occurrence of lactic acid in the blood of normal rabbits, to the extent of .05 per cent. (in dogs .08 per cent.) BERLINERBLAU (Arch. für Experim. Pathologie, 1887,) also finds that lactic acid is normally present in human blood. We have yet to discover its relation to rheumatism and rachitis. In this field of physiology there has been no better worker than PROF. OSLER. His views that the white blood-corpuscles do not develop into red, and that the function of the blood plaques of OSLER is the generation of the fibrin ferment, are now generally accepted by physiologists.

5. *Urine.*—POSNER (Arch. für Anat. and Physiologie,) maintains that albumins, more especially peptones, are present in the urine of every individual; but the amount is so small that their presence can only be demonstrated after concentrating the urine by evaporation.

6. *Histology.*—Great improvements have been made in the methods and reagents in staining, hardening and fixing tissues. FLEMING and STRASSBERGER have done an immense amount of work on the cell, but it was left for CARNOY to complete these studies. He makes four divisions of cell protoplasm: (1) the granules or chromatine bodies, (2) connecting rods between these chromatine bodies in the nucleus he named caryoplasma, (3) these connections without the nucleus he named cytoplasma, (4) the fluid in the cell he named enchylema. He rightly asserts that the chromatine bodies are the seat of life. They are diminished after secretion and exhaustion, and absent in slow death of the cell, as may be seen in cell death from amyloid, colloid, or mucoid degeneration. In the light of this histology, I think there can be no doubt that amyloid material is the enchylema or lifeless fluid, plasma holding ptomaine in weak chemical combination or solution, the latter giving the diagnostic color with certain staining reagents.

One more point. When I have referred to the work done on the nerve terminations, I have done (I have not touched on the late physiology of the nervous system). PFLUGER, of Germany, demonstrated the nerves entering into the cells of the parotid gland. MCCALLUM, of Toronto University, demonstrated the nerve terminations in the epidermis and liver. In each of these he found the ultimate endings were in the network of the cell or nucleus.

The abnormal relation of the cell to the nervous system, I feel sure, will yet be the pathology of carcinoma.

Correspondence.

SOME ANOMALIES OF NATURE.

Before they are forgotten by the march of civilization, I wish to record some very unusual cases, which may interest the future physiologist:

Case 1, Mr. W., was one in which no teeth ever developed. He was in every other respect a perfect specimen of physical manhood, and, being a carpenter, was noted as a hewer of wood. The alveolar process of the jaw never developed; but the gums were so hardened, he was able to chew and eat almost any food prepared for those having teeth. One peculiarity of this man was that his nose and chin approximated too close for beauty. Why this arrest of the teeth I am not able to say.

Case 2, Mr. Johns, now 82 years of age, is just the opposite extreme. He is in perfect health, and has a full set of teeth, perfectly sound. He has enjoyed good health all his life with but one exception, which is worth relating. On this occasion he was taken suddenly sick, DR. TETROW, of Phillipsburg, O., being called. The doctor grew alarmed at the serious illness of the patient and called DR. J. C. REEVES, of Dayton, Ohio, whose decision was that the patient could not live 24 hours. A good neighbor friend, upon hearing the decision of the doctors started off to go to a neighboring village, on foot, to buy a pair of shoes to go to the funeral. But, contrary to all expectations, the patient is still living, well and hearty, and he who started off to buy the shoes to be ready for the funeral took sick soon after his return and died within a week.

Case 3.—Wm. M., a man fifty years of age, still has the majority of his teeth, and all were double and very firmly fixed in the jaw, so that they were difficult of extraction. However, this mortal's toothache was just the same as any single toothed person—not a bit easier.

Case 4.—A child which never cut a tooth till eighteen months of age, and then surprised its friends by cutting all at once, and recovered.

I submit these anomalies without explanation or comment, simply desiring to report them as I have seen them, hoping they may interest others and furnish food for reflection.

F. A. DUCKWALL, M. D.

WEST BALTIMORE, O.

THE LATE MEETING OF THE MICHIGAN STATE MEDICAL SOCIETY.

The recent meeting of the State Medical Society fully demonstrated the fact that Detroit is the only place in the State suitable to hold the annual meeting, and that we should hold it there every year and pay for our accommodations too, just the same as ordinary weaklings have to. To the local doctors where our meetings are held they are a burden, and instead of squandering our finances in fulsome and unnecessary bequests, we had better pay our secretary for brow-sweat over that interminable, everlasting, long-lingering, inexhaustible combination of misfortunes—which very few ever hear of—yclept the "Transactions of the Michigan State Medical Society." This growing, thriving but sequestered volume will soon be compelled to run on journalistic wheels as our "American Medical Association Transactions" did a few years ago. Anybody could edit it, even if he parted his hair in the middle, for he would have nothing but the chaff to blow through, as the medical journals would have taken the kernel and gone. The AGE of the 25th ult. makes a centre shot in its editorial notes on the meeting. It is so terse, so true, so pat, that I wish every member of the Society could read it. The editor is a trifle under constraint. Thank God, I'm not! "My sword's my own!" I have kept the Hippocratic oath, and whenever I see collusion, fraud, deception or tyranny controlling thought or action in Society, I kick! I abhor slavery, slavishness and sycophancy, and I can admire a man who stands up for what he believes to be right, even though he be wrong—until his reason is convinced—as against one who takes the drivel of every man whom circumstances has placed in position above him. "I'd rather be a dog and bay at the moon" than cringe and crawl to men whom accident has placed in a place they ill deserve.

Finally, I want to observe to you, gentlemen, who seemed so anxious to spike my burlesque resolution on Listerism to the table—with questionable correctness, too, as to declaration of the vote (although it was not in a debatable shape and went where I wanted it to go). I say, I want to observe one thing, and that is, that resolution doesn't stick to the table half as strong as a hand-polished letter that I received from our secretary the other day would seem to indicate. No, gentlemen, like BANGUO'S ghost, that question won't "down." You have got to contend for it with men of brains and brawn, men who have had forty years, more or less, of hard-headed experience, men who mean business and don't part their hair in the middle either, don'tcherknow, men whose hand-made evidence, coming hot from the forge of experience, will discount all the sweetened wind which floats over the silvery tongues of certain teachers and comes to us laden with perfume from rosy-lipped young doctors and attaches of hospitals.

I sometimes read their ephemeral effusions, which I receive like summer showers. Read them out of pure sympathy for the author, who, it always seems to me, is traveling through this world like a borrowed pup, "no one to love, none to caress him."

These men, however, together with other integrals go to make up the grand superstructure of sound, level-headed medicine, and as time polishes their heads and brushes away the fluff of professional incipiency, the "everlasting grind" will bring them all to the proper impalpable condition of minuteness.

E. B. WARD, M. D.

LAINGSBURG, MICH.

LEMONS AS A PROPHYLACTIC OF DIPHTHERIA.

In the AGE of June 25th, I find an article entitled "The Prophylactic Treatment of Diphtheria." I desire, for the first time, to give my experience, for whatever it may be worth, to the profession. Eight years ago last winter I was engaged in practice in the eastern part of this state, where we had an outbreak of diphtheria. It was one of the worst types I ever saw, and many were the homes made desolate. It was whilst in attendance upon a little boy that I, through accident and his persistence, was led to think out a plan that has served me so well that I have not had one case of death to record from diphtheria since I got the idea worked out. The case of the little boy was so severe and seemed so utterly hopeless, that I felt sure he must die, and that, too, in a few hours at most. The child craved and begged for lemons, and out of a desire to pacify him, and feeling that it could make no difference, I told the parents to let him have all he wanted of them. I left him thinking that was the last time I should ever see him alive. Next morning, upon making a visit to another sick one in the family, I was surprised and gratified to find the little fellow alive, and not only alive but very much better. I began to think of the matter, and from that time on I ordered lemons in every case, in conjunction with other treatment, and from that day to this I have never lost a case, except in cases of laryngeal diphtheria, and even in a number of these I have witnessed recoveries. I usually prescribe tr. ferri chlor. with the saturated solution potas. chlor., and quinine if the heart seems weak. Plenty of good food, by preference milk with pepsin is insisted on. I am fully aware that this may sound like an extravagant statement. I know, too, that it is only one man's experience, and that it only covers the short period of a trifle over eight years, and, so far as the

sum total of experience with diphtheria is concerned, it is a very small matter. But I never think of prescribing for a case of diphtheria without urging the free use of lemon juice. As a prophylactic, I regard it as one of the very best. In proof of its prophylactic powers, I will say that I never saw but one case attacked with the disease that used the lemon juice, and that one promptly recovered. I think I have seen everything used that has been advised, from christian science to hydrargyrum bichloride. I have witnessed deaths from diphtheria under the use of all of them, but not one under the use of lemon juice and the iron and chlorate of potassa treatment. With the hope that some one else can have as many pleasant reflections resulting from the management of this once to me direful disease, I submit the above imperfect report.

M. SHOEMAKER, M. D.

SIOUX CITY, IOWA.

A HINT IN REGARD TO THE ADMINISTRATION OF CASCARA SAGRADA.

I give my fellow-practitioners the following incident as a hint: A gentleman called to see me in regard to his wife. He told me that for years she had been suffering from constipation, piles, headache, etc., but would not agree to take *medicine* of any kind, I told him to send her to me; that probably I could advise such dieting and hygienic measures as would palliate her condition. The next morning the old cyclone called herself. She said she had tried every doctor in reach of her, and that she was determined never to take any more "pills and draps." After asking her a few questions, I told her that medicine was out of the question in her case; that by dieting herself properly, and by taking a littie port wine, she would soon regain her former health. That suited her exactly, as she didn't object to "sperits." Ascertaining where she intended to get the "sperits," I saw the druggist privately, and had him to add as much cascara sagrada cordial as would give 12 to to 14 drops in each 2-oz. wineglassful of "sperits." I told her that the wine, by its stimulating and tonic properties, would aid digestion, and that the bowels would correct themselves. I also told her to lessen the quantity of wine if the *digestion* was *too vigorous* (she was to take a glassful before each meal). In a couple of weeks, according to promise, she called again, and told me that she was renovated throughout; that her bowels were regular, her head was clear, her sleep was sound, and her piles had almost disappeared "That wine done it all," she said, "and I never expect to take any more drops or pills as long as I live."

Physicians can give this pleasant laxative in many ways without the knowledge of the patient. Considering the smallness of the dose and the mildness of the drug, babies and children can be made to take it unknowingly in various ways.

JOHN ANDERSON, M. D.

FULTON, KY.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., JULY 10, 1888.

Editorial.

THE REMOVAL OF THE PLACENTA.

CREDE, whose method of removing the placenta has been much talked of, replies in the Archiv. f. Gynæcologie, to some of the criticisms which have been passed on that method. Singular as it may appear to those who have adopted this method in practice, great fault has been found with it, and CREDE'S reply is quite opportune. Previous to his advocacy of this procedure but two means of emptying the uterus were in vogue: first, removal with the hand, or an instrument, and, secondly, the expectant method, in which nature was relied on solely. These are known as the "internal" method, as distinguished from the "external," which is now almost exclusively employed by the more advanced accoucheurs.

The most plausible objection to CREDE'S method lies in the fact that it specifies no time at which it should be employed. The author can fix no other rule than such as is supplied by the indications in a given case. It should be employed when any one of the three indications demanding interference, presents: a dangerous condition already established, the prevention of accident, or the saving of time.

Regarding the first there can be no question, the patient must be rescued from her peril at once by bringing labor to a close. Regarding the second, CREDE'S experience has led him to believe that in the majority of normal labors, when the uterus contracts well, and responds to massage promptly, that three or four afterpains suffice to expel the placenta in from fifteen to thirty minutes after the birth of the child. He does not, however, advise that labor be ended invariably in this time; he recognizes the fact that many circumstances may render the exercise of a more expectant course of action necessary. The saving of time and suffering he thinks well worthy of serious consideration, from the interests of attendants and patients alike, especially since the method of treatment advised exposes the patient to no added danger.

He replies to the objection that greater loss of blood results from his treatment, by stating

that the loss of blood in a labor depends upon so many factors that it would be difficult to assert that any one is solely the cause; he is positive that the loss of blood is not increased, but in his experience diminished by his delivery of the placenta.

He also thinks that the retention of chorion and decidua is not more frequent among patients so treated. It occurs with about equal frequency with various methods of treating the third stage of labor. In four and one-fourth years he has treated 4,969 patients in the Leipzig clinic without a case of retention, death, or serious complications which could be attributed to this treatment. The cause of puerperal accidents he believes to be the meddlesome practice of the accoucheur; for fragments of placenta and membranes, when left to nature and without infection conveyed by instruments, CREDE believes to be innocuous. Autoinfection in such a case he considers impossible; the infecting material must come from without, and be absorbed by a recent wound, or an old wound recently freshened.

This statement will, we think, not meet with universal or, indeed, even general acceptance.

To the criticism that uterine massage or "rubbing of the uterus," is unnecessary and dangerous, CREDE replies that he does not advocate violence, but gentle, patient massage and stroking of the uterus, which when done by a practised hand cannot do harm. This method is not difficult to acquire, but is not a trivial procedure, or one to be performed without care and skill. A student should first learn to stroke gently the entire anterior surface of the uterus, then to straighten the uterus, and place it so that its direction (or axis) corresponds with that of the sacrum and coccyx, and, finally, he should add pressure exerted upon the uterus. The last is intermitted during uterine contractions. It is usual in patients so treated to find the placenta lying in the vagina after a short time.

A substitute proposed for this treatment is pressure by the abdominal muscles, which evidently is poor reliance in a condition where the tissues have been distended and weakened, and where the mother's strength is nearly spent by her labor. To the proposals to rub or massage the inferior segment only of the uterus, and also to push it upward above the supposed site of the placenta, CREDE replies that the most efficient muscle of the uterus is in the superior and not in the inferior segment, and hence the part most powerful to contract should be stimulated. If the uterus be strongly pushed up immediately after delivery, a laceration of the cervix may be made larger; it is unnecessary strongly to raise the uterus, for stimulation of any portion of the uterine muscle will result in the contraction of the whole. He does not believe that the placenta is separated by the formation of a blood-clot between the placenta and the uterine wall, but believes that the uterus expels the placenta by its contractions, as it does the child.

CREDE feels justified in concluding that the method which he originated is correct in principle, and is without objection. He has no reason as yet to alter his method; the improvements suggested by others are already possessed by his treatment, or they are unimportant. He believes that no occasion has been shown for adopting any of the modifications proposed.

INSANITY IN ITS MEDICO-LEGAL ASPECTS.

The average medical practitioner enters upon the practice of his profession with, at best, the most rudimentary knowledge of psychology. With no exceptions, to our knowledge, the medical colleges, of this country at least, embrace no such course in their curriculi as fits the graduate to give an intelligent opinion touching the agency of the brain in intellection, while the knowledge which they impart to their students of the connection between cerebral change and mental aberration, is absolutely nil. In spite of these indisputable facts, medical practitioners are invariably summoned to give testimony touching the sanity or insanity of those in whose behalf the plea of of mental alienation is set up. This is an anomaly the full import of which is not generally considered. How the most intimate acquaintance with the anatomy and even the physiology of the body in the present state of our knowledge, can qualify one to give an opinion touching the state of the mind is something which no one who thinks deeply on the subject can comprehend. While the brain is unquestionably the organ of the mind the scalpel has not yet been able to unearth its modus operandi, or to furnish data on which to found any intelligible system of psychiatry. We are as yet but as children playing blind-man's-buff, in our efforts to fathom this mystery with no other means of assistance than even our most advanced knowledge of anatomy and physiology. We, at best, but speculate.

Doctors sometimes differ on the witness stand, but in no department of medicine are the discrepancies so marked as when a number of practitioners take the witness stand in a case in which a question of insanity is involved. Even experts, so called, frequently succeed in making themselves quite ridiculous, and to that extent defeat the ends of justice. These discrepancies are commonly attributed to the fact that the testimony is, as a rule, *ex parte*. DR. ZENNER, of Cincinnati, however, in a paper read before the late meeting of the American Medical Association, defends the profession against this charge, and while admitting the unsatisfactory exhibition of the

doctor in the witness stand, does not suspect, for a moment his entire honesty. The difficulty, he holds, lies, in most instances, in lack of opportunity to make the necessary observations to assure a positive diagnosis. The important truth is not generally appreciated that special attainments are often equally or more necessary in order to know how and what observations to make, as to judge from those observations what is the true diagnosis. In obscure cases untrained observers cannot be relied on to find hidden symptoms, any more than they can be to point out the diagnostic tests in obscure cases of internal disease. The hypothetical cases put by the advocate are often worse than useless. There is, DR. ZENNER declares, but one satisfactory mode of arriving at a safe diagnosis in criminal cases where the mental status is very obscure or doubtful. The individual should be held for a length of time, the duration varying according to the necessities of the case, in an asylum or other suitable institution, where he could be held under constant and competent observation.

The above suggestion is one of the most valuable advanced in connection with the question of how best to correct the existing very unsatisfactory condition which obtains in regard to the alleged insane in our courts of justice. No man, whether physician or layman, should be permitted to express an opinion as to the sanity or insanity of one charged with a crime, until he has had him under a period of close observation. With such a rule in operation, the thing of having physicians take the stand to give testimony in regard to the condition of men they have never seen, would be prevented, and the profession would be correspondingly advanced in public estimation.

In the course of his able paper DR. ZENNER makes some very striking observations. This will commend itself to all who have given the matter any thought:

Questions of insanity in court, indeed the whole subject of the disposal of the insane, would become a much simpler matter if proper views were held and proper measures taken as to the treatment of all defective classes. A large part of the defective class is composed of criminals. At least, a large part of the crime class is naturally defective. Their history shows this. It is only in recent years that the mental status of criminals has been made the subject of special study, and more philosophical views entertained as to the nature of crime. In many instances they are found to be possessed of impaired nervous systems and abnormal mental traits. The anatomical investigations of this subject are yet in their infancy. The view that there is a certain type of criminal brain must be looked upon as chimerical, but various anatomical defects or abnormal configurations of the skull have not infrequently been found, conditions which seem to ally such brains with those of degenerative forms of insanity, especially paranoia. Of more value are the clinical studies of the crime class. A valuable contribution to this subject has recently been made by DR. ROBINSON, physician to the Eastern State Penitentiary of Pennsylvania

His observations are to the effect that a large percentage of such individuals belongs to families of criminals in which, at the same time, insanity or other nervous diseases are found, and that the criminals themselves present various abnormalities about the skull, are often the subjects of nervous diseases, and are not infrequently already, or become, insane. In perpetrating criminal acts they often are merely acting according to the depraved instincts of their nature, rather than from necessity or greed.

Such facts indicate the presence of abnormal nervous systems, or that the individuals belong to the defective classes of society. This must be accepted as true not of all, but of a large part of the crime class, and its general recognition is important because it would tend to create the proper feeling toward this class and lead to their suitable treatment. The insane were formerly believed to be possessed of evil spirits, and subjected to scourging and other brutal treatment. When it became known that they were the subjects of disease they began to be treated with the care and leniency due to human affliction, with the result of ameliorating their condition and assisting their restoration to health, thereby benefiting society at large, as well as adding incalculably to the well-being of the afflicted.

Notes.

AN OLD-TIME DOCTOR.—Many will recognize in the following admirable pen-picture by JAMES WHITCOMB RILEY (Medical Register) a likeness of the doctor who is fast becoming but a memory, and but few of whose descendants still survive. DOC SIFERS has played an important part in the history of the profession of this country :

Of all the doctors I could cite you to in this ere town,
Doc Sifers is my favorite, jes' take him up and down;
Count in the Bethel neighborhood, and Rollins, and Big Bear,
And Sifer's standin's jes' as good as ary doctor's there.

There's old Doc Wick, and Glenn, and Hall, and Wurgler, and McVeigh,
But I'll buck Sifers 'ginst 'em all, and down 'em any day;
Most old Wick ever knowed, I s'pose, was whisky; Wurgler—well,
He et morphine—ef actions shows, and facs' reliable.

But Sifers—though he ain't no sot, he's got his faults; and yit
When you get Sifers onct, you've got a DOCTOR, don't fergit.
He ain't much at his office, er his house, er anywhere
You'd natchurly think certain fer to ketch the feller there;

But don't blame Doc—he's got all sorts o' cur'ous notions, as
The feller says—has "odd-come shorts," like smart men
mostly has;
He'll mor'n like be potter'n round the blacksmith shop, er in
Some back lot spadin' up the ground, or gradin' it agin;

Er at the workbench, planin' things; er buildin' little traps
To ketch birds; galvenizin' rings, or graftin' plums, perhaps.
Make anything, good as the best—a gunstock, er a flute:
He whittled out a set o' chessmen onct o' laurel root.

Durin' the army—got his trade o' surgeon there—I own
To-day a finger-ring Doc made out of a Secesh bone.
And glued a fiddle onct for me—jes all so busted you
'D a-throwed the thing away, but he jus' fixed her good as
new.

And take Doc, now, in ager, er biles, er rheumatiz,
And all afflictions thataway, and he's the best they is.
Er janders—milksick—I don't keer—k-yore anything he
tries—
A abscess, getherin' in yer yeer, er granilated eyes.

There was the Widder Daubenspeck, they all give up fer
dead;
A blame cowbuncle on her neck, and clean out of her head.
First had this doctor what's his name, from "Puddlesburg,"
and then
This little red-head, "Burnin' shame" they call him, Dr.
Glenn;

And they "consulted" on the case, and claimed she'd haf to
die:
I jes' was joggin' by the place, and heered her dorter cry,
And stops and calls her to the fence, and I says-I,
"Let me
Send Sifers—bet you fifteen cents he'll k-yore her."
"Well," says she,

"Light out!" she says. And, lipp-tee-cut, I loped in town,
and rid
'Bout two hours more to find him, but I kussed him when I
did—
He was down at the gunsmith-shop a stuffin' birds. Says he:
"My sulky's broke." Says I: "You hop right on and ride
with me."

I got him there, "Well, Aunty, ten days k-yores you," Sifers
said—
"But what's yer idy livin' when yer jes' as good as dead?"
And there's Dave Banks—jes' back from war, without a
scratch, one day
Got ketched up in a sickle-bar—a reaper runaway:

His shoulders, arms, and hands, and legs, jes' sawed in strips;
and Jake
Dunn starts fer Sifers—Feller begs to shoot him fer God-sake!
Doc, 'course was gone, but he had penned the notice: "At
Big Bear,
Be back to morry; gone to tend the Bee Convention there."

But Jake, he tracked him; rid and rode the whole endurin"
night,
And 'bout the time the roosters crowed they both hove into
sight.
Doc had to ampitate, but 'greed to save Dave's arms, an'
swore
He could a-saved his legs ef he'd been there the day before.

Like when his wife's own mother died, 'fore Sivers could be
found,
And all the neighbors, fer and wide, a all jes' chasin' round;
Tell, finally—I had to laugh—it's jes' like Doc, you know—
Was learnin fer to telegraph, down at the old dee-po.

. . . . . .

But fer all they're faultin' Sifers, they's none of 'em kin say
He's biggety, er keerless, er not posted anyway;
He ain't built on the common plan of doctors nowadays;
He's jes' a great, big, brainy man—that's where the trouble
lays.

—*James Whitcomb Riley*—

Medical Register, June 23, '88

The question of the ability of a woman who has had gonorrhœa, to conceive, again referred to by DR. CLARK in our present issue is one of much importance, and ought to be definitely settled if possible. DR. CLARK, it will be noticed, controverts the statement that gonorrhœa prevents conception, as one of its sequelæ, and adduces apparently convincing proof in support of his position. We cannot but believe that the question of the location of the specific inflammation, which does not seem to have been considered in the discussion, has not received sufficient attention. There is a vaginal gonorrhœa and a uterine. Not all cases of gonorrhœa involve the uterine lining or even extend into the cervix. The vagina is but a passage way and plays no part in the process of fecundation, unless its morbid secretions interfere with the vitality of the spermatozoa. It is not difficult to understand that when the specific inflammation extends to the delicate lining of the uterus it may produce changes therein which prevent the proper attachment of the fecundating germ. We are inclined to the opinion that conception cannot occur in a uterus which has once been affected by a true clap, but our data are not numerous.

DR. LOVE, of the St. Louis Medical Review, was up to Indianapolis lately. When he got back home he wrote the following concerning the Hoosier doctors: "The doctors are numerous but evidently prosperous, nearly all having offices in the business center of the city, which in their appointments and general aspect suggested thrift and plenty to do. They themselves, had a uniformly well fed, well posted, well-to-do look; their pleasant countenances indicating good digestion, good bank accounts and good consciences. An observation of the mutual good will prevalent among them would in itself have been evidence that the majority are "medical society men." The doctor "with the big round head," who disbelieves in medical societies, was not apparent and I am inclined to the opinion that he is not indigenous to Indiana soil."

This is exceedingly nice and we are very sorry, indeed, to discover that the picture is marred by the following: "Heterodox medicine, with commercialistic tendencies, seems to be on the top financially here as everywhere else."

Of the antipyretic drugs so much in vogue of recent years many of the most important are patented, and are thus out of the pale of recognition by members of the association. That is they cannot be prescribed without a direct violation of the Code of Ethics. Notwithstanding this fact, however, they are regularly prescribed by the most regular physicians, and even the Journal of the American Medical Association, edited for the Association by the one great expounder of our ethical laws, admits articles to its columns and prints editorials commending them. It may surprise some of our readers to learn that such drugs as salicylic acid, kairine, antipyrine, sulphate of thallin and salol are patented.

It is now intimated that SIR MORELL MACKENZIE knew well that the late German Emperor had cancer of the larynx, but that for State reasons he excluded malignancy from the diagnosis, and thus directly antagonized the German surgeons who maintained from the start that the disease was carcinoma, and necessarily fatal. Had it been undisputed that the Crown Prince was afflicted with an affection to which he must soon succumb, a regency would have been established on the death of EMPEROR WILLIAM, and thus the Prince's wife, who is a daughter of QUEEN VICTORIA, that shrewd old lady (God bless her), would never have been Empress of Germany. SIR MORELL is an Englishman and loves his Queen, and if it is true that he played the part suggested, in this little piece of statecraft, who is there that will blame him?

DR. WM. A. HUNT, of Indiana, advises that a doctor's clothes be built as follows: Four outside pockets in vest, one for gold watch, another for quinine in oval case, a third for hypodermic syringe, fever thermometer, caustic holder and lead pencil, and the fourth for tongue depressor and ophthalmoscope. In dress coat he should have two pockets; one for stethoscope, plexiometer and hammer, and the other for visiting list. The pants should have four pockets: 1, for cash; 2, for physician's knife; 3, for pocket instrument case; and 4, for clean pocket handkerchief. There should be no pockets, he says, for whisky, tobacco or cigars, from which it is to be inferred that boots and hat may be utilized.

The Centralblatt für Chirurgie, one of the leading medical journals of Germany, contains an advertisement of Warner's Safe Cure. The nostrum is said to be extensively prescribed by the physicians of that country, and a depot of supply has been established at Frankfort-on-the-Main. The enterprize of the Safe-Cure man is said to receive important support in the fact that his name is the same as that of a Philadelphia manufacturer who, it is said, advertises exclusively to the medical profession. The Germans have not, as yet, learned to distinguish between the Philadelphia and the Rochester concerns which are thus mutually seeking an entrance for their goods into Vaterland.

The Medical World man is exceedingly prolific of suggestions. His latest is that physicians adopt some sort of a uniform dress, and gives his preference to an olive-green material. The great objection to that would occur in the fact that the ready-made clothiers could scarcely afford to keep on hand a sufficient assortment to meet the demand for the multitudinous sizes. Better let us do as we are now doing, and carry in our benign countenances the peculiar lines of beauty and intellectuality which enable the way-faring man, though he may also be a fool, to pick out a doctor at sight.

There is no season of the year in which the dear reader can more convincingly show his devotion to the editor than in the melting, sizzling summer. It is cruelty to animals to throw the whole work of filling up the journal upon the editor. A little help from each would make that poor individual's life endurable during this trying weather. It would also impart a variety to the contents which, we are sure, would be very grateful to the reader. *Verbum sap.* Something brief, pointed and crisp, you know.

The Jefferson County (N. Y.) Historical Society, proposes to settle once for all, as far, at least, as it is concerned, the question of the priority in the discovery of chloroform, by the erection of a monument to the memory of DR. SAMUEL GUTHRIE. GUTHRIE'S paper announcing his discovery was in the hands of the printer on May 8, 1831. LIEBIG'S account did not appear until November, 1831, and SOUBEIRAN'S did not appear until January, 1832. The name "chloroform" was originated by DUMAS, in 1835.

The Avesta divides physicians into five classes: 1, the perfect physician; 2, the mediocre physician, approaching the perfect one; 3, the absolutely mediocre physician; 4, the mediocre physician approaching the lowest degree; 5, the physician of lowest degree. The fees for all these classes are carefully regulated by law. It might be a good thing were this oriental plan introduced into our western civilization.

DR. EDWARD W. JENKS has been informed by a private letter from a friend in London, and one of the Fellows of the American Gynecological Society, that SIR SPENCER WELLS, SIR ANDREW CLARK, DRS. PRIESTLY, ORD and others have promised to attend the next meeting of the American Gynecological Society, which is to convene at Washington next September.

The exquisite who declared to the young lady that he always slept with his gloves on, because it made his hands so soft, was asked in return whether he did not also sleep with his hat on. He did not deign a reply, thinking, doubtless, that for the nonce the dear cweature had taken leave of her senses.

Book Notices.

A System of Obstetrics. By American authors. Edited by Barton Cooke Hirst, M. D., Associate Professor of Obstetrics in the University of Pennsylvania; Obstretrician to the Philadelphia and Maternity Hospitals; Gynæcologist to the Orthopœdic Hospital; Fellow of the College of Physicians of Philadelphia, etc. Vol. I. Illustrated with a colored plate and 309 engravings on wood.
Philadelphia: Lea Brothers & Co.

With "American Systems" of Surgery, Practice of Medicine and Gynæcology in the market, it was but fitting that an American System of Obstetrics be prepared, although it must be admitted that the distinctive impression made by this country on the former divisions of medicine is not to be so clearly detected in the latter. While we can boast of eminent obstetricians in the history of this country, there have been none to impart a distinctively American character to this division of medicine. We are not prepared, therefore, in taking up the book before us, for anything more from the American authors who contribute to it, than an elaboration of views which have their origin across the water, and chiefly in Germany. The preëminence of Germany in the line of obstretrics is marked, and the fact is not difficult of explanation. In the medical colleges of that country obstetrics is taught both as a science and as an art, and there is no lack of material for practical demonstration. There not that—delicacy, shall we call it? among the Germans in their relations to women that there exists among the Anglo-Saxons. Perhaps we carry our delicacy in the matter of exposing the female genitalia to an unreasonale extreme, but be that as it may, the fact remains that the exposure of a woman in labor to a class of students in this country, would meet with general professional, as well as lay condemnation. But it is otherwise in Germany, and the result is that the study of obstetrics is correspondingly stimulated.

The volume before us opens with a History of Obstetrics, by Geo. J. Englemann, M. D., of St. Louis, Mo. We think we are safe in declaring that this is the most complete and the ablest chapter on this subject which ever found its way into print. It shows a depth of research and a personal familiarity with customs which have been perpetrated to the present time from past ages, which is evinced by no other author. It divides the history of obstetrics into two eras, that of Empirical obstetrics and that of Scientific. The Empirical is subdivided into the Religious Epoch and the Advanced Pre-anatomic Epoch. The Scientific is also divided into well-marked epochs. The first extends from 1550 to 1800 A. D., and is styled the Period of Development—Surgical Period. Podalic version (1550) the introduction of the forceps (1647) and the perfection of the forceps (1754) mark this period. The Period of Perfection extends from 1800 to 1888, and is characterized by the application of the physiological method of Solayres and Baudelocque, the discovery of anæsthesia and the infectious nature of puerperal fever, and the introduction of antisepsis. The advances which followed in the wake of these epochal discoveries are minutely considered, and the chapter as a whole is certainly an acquisition to the literature of obstetrics. It is an admirable introduction to the work and at once prepossesses us in its favor.

Scarcely less marked in its thoroughness is the second chapter of the book, on the Physiology and Histology of Ovulation, Menstruation and Fertilization: The Development of the Embryo, by H. Newell Martin, F.R.S., M.D., of Baltimore, Md. Nothing quite as thorough and complete is to be found in any existing treatise.

The editor, Dr. Barton Cooke Hirst, contributes an equally able and thorough chapter on The Fœtus; Its Development, Anomalies, Monstrosities, Diseases, and Premature Expulsion. Then follow chapters on Pregnancy: Its Physiology, Pathology, Signs, and Differential Diagnosis, by William Wright Jaggard, M. D.; The Conduct of Labor and the Management of the Puerperal State, by Samuel C. Busey, M. D.; The Mechanism of Labor and the Treatment of Labor Based on the Mechanism, by R. A. F. Penrose, M. D.; The Use of Anæsthetics in Labor, by J. C. Reeve, M. D.; and Anomalies of the Force of Labor, by Theophilus Parvin, M. D.

The volume as a whole is one which commends itself to the attention of all students of this important division of medicine. It is needless to state that it is placed before the profession in the best style of the book-maker's art, the paper, letter-press and binding being after Messrs. Lea & Co.'s best style.

The Practice of Medicine, or the Art of Specific Healing. By I. J. M. Goss, A. M., M. D., Professor of the Practice of Medicine in the Georgia Eclectic College of Medicine and Surgery. Author of "The American Practice," Materia Medica, Pharmacology and Therapeutics.
Chicago: W. T. Keener.

This is an octavo volume of 569 pages, of imposing appearance and gotten up in excellent style. We regret that our familiarity with "Specific Healing" is not sufficiently great to qualify us for the expression of an intelligent opinion of its merits, although the author acknowledges his indebtedness for the pathology which it embodies to Green, Virchow, Koch, Skoda and others, with whom every regular physician is supposed to be familiar. The author says he was taught the time-honored sys-

tem of Paracelsus in the University of Georgia, and also in that of Pennsylvania. Now we were taught to believe that PARACELSUS was a notorious quack. He maintained that the body is composed of salt, sulphur and mercury, in which health and disease consist. His real name was PHILIP HOCHENER, but this was quite too plebeian a name for such as he, and he, accordingly, on commencing his profession career, changed it to PHILIPPUS AUREOLUS THEOPHRASTUS BOMBASTUS PARACELSUS. He is chiefly noted for rabid vilification of his contemporaries and predecessors. If his name is "time-honored" we do not know it, and we are surprised to learn that the University of Pennsylvania was ever guilty of teaching his system to its students. We are disposed to believe that DR. GOSS libels this ancient and honorable seat of learning. But perhaps the author confounds PARACELSUS with CELSUS, the medical Cicero, noted for his devotion to the teachings and principles of HIPPOCRATES and his defense of anatomy against the empirics. He was a good man and worthy to be held in lasting remembrance.

DR. GOSS' book is hardly one to be commended for its pathology or diagnosis. There are other works which discuss these more fully. It is, however, quite full in the matter of treatment, and pays especial attention to the applications of our indigenous flora. It is, therefore, eminently a practical book, and will be appreciated by "practical men," so-called.

DISORDERS OF MENSTRUATION. By Edward W. Jenks, M. D., LL. D., Professor of Gynecology in the Michigan College of Medicine and Surgery; Fellow of the American Gynecological Society and of the Obstetrical Society of London; Honorary Member of the Cincinnati Obstetrical Society; President ('87-'88) of the Detroit Gynecological Society, etc., etc.
Detroit: George S. Davis.

This is a number of The Physicians' Leisure Libary Series, and is a duodecimo volume of 120 pages. The author has aimed throughout to divest his subject of speculation and to confine himself strictly to practical matters in connection therewith. This he does with the pen of one who has had large experience himself, from which he is able to judge of the wants of others. The little book is eminently practical, and is written in the able author's best vein. It is a valuable acquisition to a very valuable series. It is well illustrated, and it will pay any practitioner to have it as a pocket companion which to refer to in leisure moments.

Therapeutic Brevities.

TRIPSIN IN DIPHTHERIA.—The following combines the *antiseptic* and *solvent* treatment of diphtheria in children:

℞ Tripsin, ʒ ss,
Sodii bicarbonatis, ʒ ss,
Hydrarg. chloridi corros., gr. ½,
Glycerini, ʒ i,
Aq. rosæ, ℥ j.

M. Sig.—Spray.

SODIUM IODIDE IN PHTHISIS.—POTAIN (Bull. Gen. de Therap.) finds benefit from the following in phthisis:

℞ Sodii chloridi, ʒ ijss,
Sodii bromidi, ʒ i gr. xv,
Sodii iodidi, ʒ vss. gr. iij,
Aq. destillatæ, ℥ iij ʒ i.

M. Sig.—A dessertspoonful every morning, in a glass of hot milk.

CREASOTE HYPODERMICALLY IN PHTHISIS.—In a recent work on the treatment of phthisis, by HEBARD, CORNIL and HAVAT, the following formula is given:

Peptone, dried, ʒ 2½,
Pure creasote, from beech wood, ♏ 45.
Glycerin, neutral, ʒ 17½,
Alcohol, ℥ 2½,
Distilled water, ʒ 5,
Hydrochlorate of morphia, gr. 1½.

Dose—Fifteen minims, repeated several times (as many as four or five times) daily, deeply injected.—*Medical News.*

FOR TAPEWORM.—The following is a convenient formula for the exhibition of wall fern:

Ethereal oil of male fern, ♏ 45,
Tinct. vanilla, ♏ 45,
Syrup, 36½,
Powdered gum acacia, gr. 30,
Distilled water, 36½.

To be taken at one dose, in an equal quantity of milk. Castor oil should be taken two hours afterward.—*L'Union Medicale, Medical News.*

PIGMENTATIONS IN PREGNANCY.—The Journal of Cutaneous and Genito-Urinary Diseases quotes DR. MONIN as authority for the following:

℞ Cacao butter,
Castor oil, ää ℥ ijss,
Oxide of zinc, gr. v,
White precipitate, gr. ij—x.

M. Sig.—Apply morning and night.

Medical Progress.

ON THE USE OF CODEINE TO RELIEVE PAIN IN ABDOMINAL DISEASE.—Thanks to its recommendation by DR. PAVY, codeine is largely used in the treatment of cases of diabetes, but at present its use is almost confined to this disease, and it is rarely employed for other purposes, excepting perhaps that of soothing cough or irritation in the throat.

Codeine was discovered by ROBIQUET in 1832, and two years afterwards its action was tested upon himself by GREGORY,* who found that, instead of causing sleep, it rather caused excitement, and had also a slight laxative tendency. It was applied therapeutically by BARBIER† in 1834, who noticed that it seemed to have a special action upon the sympathetic system, and found that it was of great use in lessening pain in persons presenting symptoms of irritation in the solar plexus. Such symptoms are pain in the epigastrium, spreading to the sides and back, and associated with a feeling of burning, anxiety, depression, more or less tenderness of the epigastrium, with sighing, lack of energy and tendency to faint. Occasionally the pain may cause symptoms of collapse, palpitation, and vomiting. In such cases BARBIER gave a grain of codeine in a tablespoonful of syrup, and repeated it if necessary in one or two hours with the best results. From his observations he came to the conclusion that codeine acts chiefly upon the sympathetic nervous system, and especially upon that part of it which is in the region of the stomach; that it is a most useful remedy in abdominal neuroses depending upon disordered condition of the nervous plexus in the abdomen, and especially those in the gastric region; that it does not disorder the digestion, and rather aids than interferes with the action of the bowels. He found also that it produced sleep with tolerable certainty, and that this sleep was never followed by heaviness in the head or stupidity, but, on the contrary, persons who had taken it felt happy, and were disposed to be cheerful on awaking. About twenty years later, in 1856, ROBIQUET'S‡ son undertook some observations on the action of the drug which his father had discovered. The results he obtained, however, did not quite accord with those of GREGORY or of BARBIER, and it is possible that the discrepancies may have been due to more or less impurity in the drug employed. In large doses he found that it caused an unrefreshing sleep followed by a period of confusion of thought: occasionally nausea and vomiting were produced. In small doses he found it of great service in hypochondriasis, relieving nervousness, irritability, and all the discomforts from which patients affected with this disorder are apt to suffer.

Shortly afterwards BERTHÉ§ made a much more full and complete investigation of the physiological action of the alkaloid. Amongst other things he confirmed BARBIER'S observation that it had a specific action upon the sympathetic, and found that it lessened the irritability of the intestine to such an extent that a dog which had received 15 grains of arsenic along with 7½ grains of codeine, exhibited neither vomiting nor purging, nor any other symptom excepting drowsiness, while another dog which had received a similar dose of arsenic without the codeine began to suffer in the course of an hour from severe pain, vomiting, and bloody diarrhœa, and indeed presented well-marked symptoms of arsenical poisoning, although it ultimately recovered. These experiments suggested the idea to me that codeine was likely to be of service in abdominal pain, and I proceeded to try it, with very satisfactory results. The class of cases in which I have used it is, I think, somewhat different from those in which it has previously been recommended, because while BARBIER, ARAN and others have chiefly employed it in gastralgia and painful disorders of the stomach, I have used it chiefly in pain affecting the intestine and lower part of the abdomen. The kinds of cases in which I have used it have been very varied. As examples I may briefly describe one or two. In one case which I saw with DR. ECCLES, there was high temperature, intense pain in the right iliac fossa, with considerable swelling, so that there could be little doubt that there was inflammation around the cæcum, although examination after the acute symptoms had subsided showed that there was also pelvic cellulitis. In this case one grain of codeine, given in the form of a pill, relieved the pain at once, and repetition of the dose whenever the pain began to return prevented its becoming at all severe.

In another case, seen with DR. PHILPOT, of Croydon, a lady, aged 50, had pneumonia of the right base, a greatly dilated heart with very irregular action, pulse so rapid and weak that it could hardly be counted, and pain over the epigastrium and spreading out from it. She was slightly jaundiced, and a tumor was felt in the right lateral abdominal region, which descended with respiration, but was partly covered by intestine, and could be moved from side to side, so that it seemed to be renal rather than hepatic. As no *post-mortem* examination was obtained the exact diagnosis could not be established, but the administration of codeine in half-grain doses relieved the pain, as DR. PHILPOT said, "as if by magic."

In another case, seen with DR. PARDINGTON at Tunbridge Wells, there was pain in the abdomen depending upon a mass of impacted fæces in the transverse colon. In this case codeine seemed to be especially indicated, as one wished to relieve the pain without interfering with the action of the bowels. In grain doses codeine relieved the pain, and the use of copious enemata, aided by washing out the stomach, cleared away the impacted mass which had given rise to the disturbance. I have tried codeine in cases of long-continued abdominal pain for which no definite cause could be assigned, as no tumor could be felt, and the functional disturbance did not seem sufficient to warrant a diagnosis of malignant disease. I have tried it in cancer of the liver and pancreas with success in relieving pain, and also in numerous cases where the age of the patient, the presence of diarrhœa, tenderness on pressure, and visible peristaltic movements, and thickening of the gut, easily perceptible on palpation, led to the diagnosis of malignant disease

* Gregory, Jour. de Pharm., February, 1834.
† Barbier, letter to Acad. de Méd., Schmidt's Jahrb., vol. ii, p. 267.
‡ Robiquet, Gaz. des Hôp., 1856, xxix, 517.
§ Berthé, Moniteur des Hôp., 1856, iv, 596, 601, 692, 1052.

in the intestine, although inability to obtain a *post mortem* examination prevented the confirmation of the diagnosis. In such cases I generally begin with half a grain, in the form of a pill made up with extract of gentian, three times a day; and if this is insufficient to control the pain I increase the dose to a grain, and give it as frequently as seems necessary. As a rule, I find that it does not produce drowsiness, nor has it interfered with the digestive functions.

To sum up, the results I have obtained from the administration of codeine have satisfied me that it has a powerful action in allaying abdominal pain, and it can be pushed to a much greater extent than morphine without causing drowsiness or interfering with the respiration or with the action of the bowels. It is, therefore, specially indicated in such a case as DR. PHILPOT'S, which I have already mentioned, where the dilated heart and consolidated lung tended to make one afraid of morphine. Codeine is also specially indicated in a case like DR. PARDINGTON'S, where one wished to relieve the pain without interfering with the action of the bowels. On the other hand, in cases where there has been much diarrhœa, as in some cases of malignant disease of the colon or rectum, the absence of any tendency to lessen peristaltic movement is rather a disadvantage to codeine as compared with morphine or opium.

I have found that in cases of long continued enteralgia without organic disease, it has continued to relieve pain for months together, without the dose being increased beyond one grain three times a day, and I have found the same to be the case where the presence of a tumor, in addition to other symptoms, had led to the diagnosis of malignant disease.

It is interesting to follow the vicissitudes of a drug, and to notice how its use extends or diminishes until at last it finds its place and maintains it. Thus digitalis, while mentioned in the London Pharmacopœia of 1721, was excluded from that of 1746. It again appeared in 1788, and since then it has held its place.

Possibly codeine, after falling into almost complete disuse for many years, may again regain a more or less important place amongst the remedies which enable us to relieve pain.—T. LAUDER BRUNTON, in *British Med. Journal*, June 9, 1888.

HYDRIODIC ACID—ITS USES IN GENERAL PRACTICE.—The difficulties which were in the way of the use of hydriodic acid, because of its rapid decomposition, were considered so insurmountable, that it was not until the year 1878, when an unalterable syrup was presented to the profession, that it came into use.

Soon after this, in 1880, my attention was attracted to an article by DR. J. B. OLIVER, of Boston, which was published in the Boston Medical and Surgical Journal, of the issue of March 4 of that year.

DR. OLIVER in his paper alluded to the use of syrup of hydriodic acid, in the treatment of asthma, and in conclusion says that DR. KNIGHT "had surprisingly satisfactory results" from the same remedy. Having under observation at this time a severe case of chronic asthma, complicated with chronic bronchitis, on which I had tried iodide of potassium, which was intolerable to the stomach, I at once put the lady, a woman of forty-nine years, upon the syrup of hydriodic acid. The effect was all that could be desired. There was an almost immediate relief from the asthmatic conditions, rapid amelioration of the cough, decreased expectoration, which was very profuse before the exhibition of the remedy. The sputa, which was thick and viscid, became thinner in character, and my patient's general health commenced to improve, and after three months' use of the syrup of hydriodic acid, in increasing doses till two teaspoonfuls were taken three times a day, complete recovery took place, and from that time till her death of pneumonia, two years later, had no relapse. The results in this case were *so* satisfactory that ever since it has been my favorite remedy *in all* asthmatic troubles, and though every case has yielded as effectually as this one, still I have never administered it in this class of diseases without unmistakable evidences of relief and comfort. In chronic bronchitis of long standing, in my hands, it has produced most excellent results, and can be given when the iodide of potassium cannot for a moment be tolerated. The cases which seem to derive the most benefit from this remedy are that class of long-standing bronchitis, when the lung seems about to take on a deeper-seated and less tractable form of disease. My attention has been frequently called, in the treatment of chronic bronchitis with hydriodic acid, to the fact that small doses frequently repeated are of signal service when larger doses do not seem to accomplish the same results. In fact, from long experience, I would suggest the constant use of the syrup in small doses, fifteen drops, gradually increasing a drop a dose until the point of toleration is reached, in order to get the most satisfactory and lasting results. While practicing at Sandy Hook, Conn., I had the opportunity of observing its action in lead-poisoning in a great many cases, lead entering largely into the compounds which are mixed with the crude rubber during the process of manufacture. I depended almost entirely on the syrup of hydriodic acid for all forms of chronic lead-poisoning. In lead paralysis, this remedy, combined with keeping the bowels quite free, and the application of the Faradic current, were the only means employed, and always with satisfactory, and oftentimes surprising results. Wrist-drop and chronic abdominal pains would yield to the remedy, combined with saline cathartics. In scrofulous diseases, of children especially, does the hydriodic acid seem to produce most marvelous results. In infantile eczema, enlarged glands, cold abscesses, indolent sores, treated with small doses, gradually increased until it is all that can be borne, will prove a source of gratification to the patient and gratitude toward the doctor.

At the suggestion of my friend, DR. F. A. BURRALL, of New York, I am using it in a case of obesity, with the result of steady diminution of the amount of fat, without a single disagreeable symptom, or interference with the general health, or the action of any of the functions of the body. In hay fever it has been used by other observers with good results, but my own experience with its use in this disease has been *nil*.

It is hardly necessary for me to more than say that in all the latest stages and manifestations of syphilis it has yielded its most magnifi-

cent results. Pleasant to take, rapidly pushed to large doses, I have found the most pronounced and favorable effects. Patients take it readily, and the improvement is so rapid and immediate that they need no urging to continue its use for as long a time as the doctor deems desirable.

My paper has now reached the limits which I prescribed for it, but I cannot resist the temptation of recording briefly one of the most unique cases of my experience with this drug. The one was a man forty-two years of age, who was a paper-box manufacturer, suffering from arsenical poisoning from the inhalation of arsenical dust arising from the glazed paper which he handled and cut. After repeated trials of other remedies the syrup of hydriodic acid made a complete cure inside of a month.—DR. W. C. WILE, in *Memphis Med. Monthly*, June, 1888.

THE ANÆSTHETIC OF THE ANCIENTS.—It is probably with almost complete incredulity that most of us have read of the anæsthetic virtues of the mandrake—the *Atropa mandragora* of Linnæus, the *μανδραγόρας* of the ancients—as recounted by the writers of antiquity and in Shakespeare's "Romeo and Juliet." Perhaps we have argued, not illogically, that, if it had really possessed the remarkable properties attributed to it, it would not have fallen into disuse so early as the thirteenth century. Natural as this way of viewing the matter is, there is recent testimony sustaining the ancient repute of the plant, and going to show that it would probably be worth while for the pharmacologists of the present day to subject the physiological action of mandragora to thorough investigation *de nova*. This testimony consists of DR. BENJAMIN WARD RICHARDSON'S account of his own researches, published in his journal, the Asclepiad.

It was his observation of the action of chloral hydrate in 1869—when chloral was a new drug, possessed of virtues now familiar, but until then generally supposed to be quite beyond the range of therapeutical properties—that first caused DR. RICHARDSON'S memory of the traditions about mandragora, to lead him to take measures to procure the genuine root for purposes of experiment. Having obtained a specimen of the root, he first experimented with a tincture, which he made with strong alcohol. This tincture, however, proved so destitute of any noteworthy action that he was inclined to believe either that the root with which he was working was not that of the true mandragora, or else that the ancient accounts of its virtues were indeed fabulous. But it occurred to him that the ancients might have been as wise in their methods of preparing the drug as they were in their conviction of its efficacy; in other words, that strong alcohol was not the proper menstruum for its active principles, and that, to do justice to the physicians of antiquity, he must substantially reproduce their *μανδραγοριτης*, which was either a vinous tincture made by prolonged digestion of the drug in weak wine, or a watery infusion with only enough wine added to preserve it. He therefore made another tincture by four weeks' maceration of the root, in fine powder, in alcohol diluted with five times its bulk of water. This product he found to possess "the most active properties—properties faithfully represented by the ancients in their observations."

We do not gather from DR. RICHARDSON'S account that he has actually observed what we should term surgical anæsthesia from the internal administration of mandragora, unless in fatal doses; but it does appear that the plant is a powerful hypnotic with some similarity to belladonna in its action, and that it has a prompt, decided, and rather persistent action as a local anæsthetic. Applied to the tongue, in man, the tincture produced a sensation of numbness that lasted for several minutes, and caused also a singular taste and sensation of acidity and dryness, which lasted for several days. Doses insufficient to produce actual narcotism caused a "desire for sleep, a sense of fullness in the vessels of the head, a peculiarly enlarged and confused vision, an exaggeration of sounds and noises, an inaction of the bowels, with white, hard fæces when the bowels were made to act, and a singular restless and nervous excitability closely akin to hysteria." These symptoms persisted more or less for two days, and left "a lingering uneasiness and coldness" for a much longer time. In the lower animals, large doses being used, deep sleep was produced, "broken by short and peculiar paroxysms, not of waking, but of excitement, as if from a disturbed dream," and the sleep was followed by manifestations of excitement justifying the old name of *μωριον*—the maddening drug—applied to a variety of the plant. When fatal doses were used, death took place by failure of the respiration, not, apparently, from trouble with the innervation, but from a flagging and final cessation of the action of the respiratory muscles, due to obstruction of the bronchial passages by an excessive accumulation of secretion. DR. RICHARDSON thinks that the action of mandragora depends on an alkaloid, and that the alkaloid might be used like atropine for dilating the pupil, might prove antagonistic to strychnine and to the poison of tetanus, and might, in case of necessity, be employed successfully as a general anæsthetic in cases of surgical operations, with comparatively little risk to life. Finally, it is probable, he says, that mandragora is a good local anæsthetic, "which, with all our advances, is still a desideratum." He promises to return to the subject on another occasion.—*N. Y. Medical Journal*, June 23, 1888.

SUBCUTANEOUS INJECTION OF "GREY OIL" IN SYPHILIS.—At a recent meeting of the Imperial Royal Society of Physicians, of Vienna, Professor Edward Lang read a paper on the subcutaneous injection of mercury in syphilis. He had long endeavored to discover some form of preparation in which mercury could be used for subcutaneous injections, and had arrived at the following formula: Hydrargyri, lanolini, ää three parts; olive oil, four parts. Such a preparation contained 30 per cent. of mercury. As to the quantity of the oil to be injected, he tried to determine this point by experiments, the result of which showed that even small quantities of mercury had a powerful influence on the disease. In ordinary cases of syphilis the injection of three decigrammes of the oil for one week was sufficient to cause most of the symptoms to disappear, or at least to diminish their severity for a period of from two

to three weeks. Professor Lang therefore injected a quantity of from 1 decigramme to 15 centigrammes of the "grey oil" in two places on the back or the buttocks during from five to eight days. These injections were continued from two to three weeks, when a pause of from seventeen to twenty days was made; the injections of similar or smaller quantities of the "grey oil" were then resumed, and so on until a quantity amounting altogether to from 1½ to 2 grammes was injected. This was the general plan of the treatment in such a case, which had, of course, to be modified according to the particular features of each case. The effect of these injections was easily understood when we estimated the quantity of the mercury injected by comparing it with sublimate. According to the calculations of Professor Ludwig, 39 per cent. of metallic mercury was contained in 1 cubic centimetre of the "grey oil," this being a quantity of mercury which corresponded to 0.52 cubic centimetre of sublimate. As usually one Pravaz syringeful (equal to 1 cubic centimetre) of the 1-per-cent. solution of sublimate was injected, it was evident that 52 syringefuls would have to be injected in order to introduce into the organism as much mercury as was contained in one syringeful of the "grey oil." When "grey oil" was properly prepared, and the injection was properly performed with antiseptic precautions, good results would invariably be obtained. Professor Lang prefers frequent injection of small quantities of mercury to large doses at long intervals, as absorption is better insured by such a procedure. When due attention was paid to the treatment, stomatitis and other symptoms of mercurialism were but very seldom observed after injections of the "grey oil." Moreover, the preparation was very well borne by patients. He had in only five cases been obliged to discontinue the treatment with the "grey oil," on account of a special idiosyncrasy with regard to mercury. The advantages of this plan may be summed up as follows: 1. The "grey oil" is a very efficient mercurial preparation, the effect of which is gradual; moreover, it permits of exact dosage, which is not the case with inunction. 2. The method is convenient for the physician and the patient. 3. The injections, when carried out with due care, cause but slight reaction. Neither Professor Lang nor his assistants have noticed any suppuration at the site of injection, though several thousands of injections have been made. 4. The "grey oil" is a mercurial preparation analogous to the mercurial ointment in which metallic mercury is contained in the most efficient form. The "grey oil" should be used in all those cases of syphilis in which general mercurial treatment is required. The best opportunity of testing the effect of an anti-syphilitic remedy is offered by syphilitic affections of the nerve-centres; and in cases of syphilis of the brain and spinal cord, subcutaneous injections of "grey oil" were attended with very satisfactory results. The "grey oil," moreover, had an advantage from another point of view, namely, that, locally applied, it facilitated the absorption of syphilitic products situated near the point of injection, in a similar way to the "grey plaster." Gummatous infiltrations on the forehead, the nose, etc., rapidly disappeared when from 0.01 to 0.05 cubic centimetre of the "grey oil" was injected. The "grey oil" can also be used in cases in which the "grey plaster" and the grey ointment" cannot be applied. Prof. Lang had, on one occasion, to deal with a gummatous cavity of the tibia which was accessible only through a very small orifice. He injected "grey oil" into it by means of a specially constructed instrument, and healing speedily took place. The mercurial oil can also be used for injections into the external auditory meatus, the membrana tympani, and the tympanic cavity through the Eustachian tube. Syphilitic affections of the larynx and the nasal cavity are better treated by a simultaneous intra-laryngeal and intra-nasal application of the "grey oil." The same also applies to affections of the eyes.—Vienna Correspondent of *London Lancet.*

THERAPEUTICS OF HAY-FEVER.—The approach of the time at which hay-fever usually appears induces me to offer you the following notes and observations.

For the past ten years, a young medical man of my acquaintance has suffered, from the beginning of May to the end of June, so severely from hay-fever that his practice has been seriously interfered with. It will be understood, as a matter of course, that he had in succession tried all the many and much-lauded remedies without any good result. Quinine, in large quantities, alone produced favorable results, and before symptoms of poisoning presented themselves. It may not be without interest to mention that urticaria broke out, beginning on each side of the spine, following the course of the chief nerve-branches down the arms and legs, and finally covering the whole body. This painful state lasted for three days, at the end of which the hay-fever disappeared —leaving, however, in the patient no desire to repeat the experiment with quinine.

In a comparatively large number of cases of hay-fever, I found that the primary indication of the disease was a slight twitching sensation at the inner corner of the eye. This sensation becomes more intense day by day; next follows a swelling of the conjunctiva, with all the accompanying symptoms of acute conjunctivitis, and the symptoms referable to the mucous membrane of the nose, asthma, etc., set in later. These slight premonitory symptoms, which sometimes precede the final outbreak by a fortnight, and perhaps disappear with a change of weather, may easily be forgotten. But even assuming that, now and again, the disease does not begin in the eyes, but in the nose or the bronchial tubes—a possibility which in principle cannot be rejected—the exception would not by any means invalidate the assertion that hay-fever usually begins with the symptoms of conjunctivitis.

Upon these facts I build my therapeutic plan. Since the first symptoms of hay-fever manifest themselves in the eye, it is probable that the agent which is to be regarded as the cause of the hay fever (I do not here refer to the pollen grains which are everywhere present during the season in which the fever prevails, and are consequently to be found in the secretion of the conjunctiva and in the mucus of the respiratory tracts) first attacks the conjunctiva; under favorable circumstances (heat) it multiplies there, and then diffuses itself over the mucous membrane of the respiratory organs,

perhaps through the medium of the laryngeal canal. To be effective the condition must be attacked by local treatment, directed to the eyes at the earliest possible date.

I will pass over the details of the experiments that were ineffectual. On the advice of my learned friend DR. PAGENSTECHER, of Wiesbaden, I chose instillation and bathing of the conjunctiva with sublimate solution, of the strength of 1 in 3,000. The bathing began perhaps fourteen days before the appearance of hay-fever, whenever the patient returned home after open-air exercise. The patient was besides required to keep as cool as possible, and to wear pale blue spectacles. The result of the treatment was that he remained free from his trouble for a length of time. Not before the end of June did slight irritation of the conjunctiva reappear, which, however, could not be compared in intensity to former attacks, and involved no complication. Relying probably upon his generally healthy condition, the bathing had not been performed with sufficient energy. Although the sublimate solution came in contact with the mucous membranes of the nose or throat only slightly, or perhaps not at all, neither of these organs was affected, which must have happened if the virus of the hay-fever passed into the body through the nose and mouth. In such an exceptional case, it would be simple enough to apply the solution by a nose douche, by garglings or perhaps even by cautious inhalation.—CARL GENTH, M. D., in *Brit. Med. Jnl.*, June 16, '88.

NOTE ON SOME OF THE DISADVANTAGES OF CASCARA SAGRADA.— Every practical physician is aware of the efficacy of cascara sagrada, the sacred bark, in the treatment of habitual constipation and the conditions incidental thereto. Although of comparatively recent introduction to this country, it has already obtained a secure footing in the British pharmacopœia. Its disagreeably bitter taste and the occasional production of tormina, however, form a bar to its more general employment. The disagreeable taste is said to be referable to the action of a ferment on a glucoside principle contained in the bark, which is split up into glucose and vegetable acid; these, in turn, undergoing further decomposition in process of manufacture. Messre. Parke, Davis & Co, of Detroit, U. S. A., who were the first to introduce Dr. J. H. Bundy's discovery to the general notice of the profession, have now by an improved method succeeded in preparing the drug without this fermentation having taken place, and have thus obtained a tasteless liquid extract—a point of considerable importance. This preparation of cascara they forward under the name of the "formula for 1887," and my object in publishing the clinical records of the following cases is to show the advantages which it possesses over the ordinary liquid extract whilst losing nothing in therapeutic activity.

As the physiological action of Rhamnus purshiana has been extensively discussed on this and on the other side of the Atlantic, it would be superfluous for me to touch upon the subject here. I will merely give the history of the following cases, which are illustrative of the occasional disadvantages of the ordinary liquid extract.

(1) A. D., female, aged forty, of lymphatic temperament, a sufferer for many years from chronic constipation with great gastric disturbance, was treated with bismuth. Improvement of the gastric trouble followed, but at the expense of increase of the constipation. All the ordinary purgatives were given with only temporary relief. Cascara sagrada was then administered, but it produced vomiting and tormina. I then prescribed fifteen minims of the "formula for 1887," in combination with four minims of the tincture of belladonna, and one minim of the solution of strychnine, water being added to make an ounce, the dose to be taken every night for a week, then every second night for another week. In the third week the cascara was gradually reduced to three minims *pro dosi;* and finally it was left off altogether at the end of ten weeks, a cure having resulted.

(2) M. M., female, aged thirty, brunette, with a strong tendency to hystero-epilepsy, had been in the habit of using large doses of Epsom salt, and stated that nothing else was of the slightest use to her as an aperient. I tried thirty minims of the liquid extract of cascara sagrada in combination with wahoo for two consecutive days, but the bowels did not move. On the third day I gave a drachm at bed-time with no better result. The patient would not take the remedy any more, as she said it "made her stomach sick" and produced griping. I now tried one fluidrachm of the tasteless preparation of cascara. There was a scanty evacuation next day. We continued this method every night for fourteen days with good results, and then every other night for another fortnight with equally good effect. I now reduced the dose to thirty minims, but could not make it less. I eventually lost sight of the patient, who was but slightly improved. I attribute the comparative failure in this case to the morbid recourse to Epsom salt whenever she believed the alvine evacuation insufficient as compared with the quantity of food ingested.

(3) F. B., male, aged thirty, subject to atonic dyspepsia for two years, was given a mixture containing the following:

℞ Extracti cascaræ sagradæ liquidi, ʒ v.
Tincturæ rhei, ʒ x.
Acidi hydrochlorici diluti, ʒ iij.
Syrupi et aquæ ad ℥ x.
Signa, ℥ j *ter in die, ante cibos.*

He found the compound very disagreeable to swallow; sometimes it even produced vomiting. Thereupon I substituted the new formula for 1887, and heard no complaints thereafter. He pronounced himself quite well in three weeks, and at the time of writing he has had no relapse.—G. E. J. Greene, L. K. Q. C. P., Ireland, in the *Practitioner*, June, 1888.

MODES OF ADMINISTRATION OF ALCOHOL IN DISEASE.—By BENJAMIN WARD RICHARDSON, M.D., F.R.S., of London, Eng.—In my lecture on the alcohols, published so far back as 1869, in the Medical Times and Gazette, I wrote: "Alcohol, one of the most commonly-used of accredited remedies, has never been properly tested as a remedy for human diseases. I mean by this that it has never been tested as alcohol of a given chemical composition, of a given purity, and in given measures. Wines, beers and spirits are anythings, compounds of alco-

hols, and compounds of alcohols with ethers and other foreign substances. It is time now, therefore, for the learned to be precise respecting alcohol, and for the learned to learn the positive use of one of the most potent instruments for good or for evil." In the nineteen years that have passed since that was published I have steadily followed out the practice there suggested, and for fifteen years past have never prescribed alcohol in any other form than the .830 ethylic alcohol—the ordinary pure but not quite absolute alcohol of commerce. I have known, therefore, in prescribing alcohol, for these years, the precise thing prescribed, which is, I think, what few can say. I have by this means learned the value of dose as well as of action. If I have wanted any other of the agents that belong to alcoholic beverages—the bitter of hop, diastase, or ether —I have added it in the same precise manner, and I most respectfully suggest that this is the only way in which alcohol can be scientifically applied in the treatment of disease.

The advantage is all on the side of accuracy; but there is another and more cogent reason for this rule. By following it alcohol is kept in the hands of the prescriber and the chemist. When it has served its purpose it can, like mercury or arsenic, or other dangerous remedies, be withdrawn. Ordered, instead of prescribed, as a common drink, the patients become their own doctors and their own destroyers. It is hard enough, as we have seen, so to prescribe alcohol as to prevent evil from it; to order it without care is to endanger its current utility, and to make the perpetuation of its evils the most imminent of dangers.

On the mode of administering alcohol by prescription a word may be useful. I prescribe .830 alcohol, adding to it usually a little glycerin; one drachm of glycerin to a half ounce fluid measure of alcohol and two ounces of water. For those adults who are not accustomed to alcohol, half a fluidounce in ten ounces of water is a good standard dose. That dose will produce a distinct physiological effect. It will quicken the pulse and will cause a preliminary rise of a fourth of a degree of surface temperature. This dose may be repeated every hour for four hours without harm, but not beyond that with impunity.

For ordinary drinkers of alcohol this dose is small. They will take an ounce or an ounce and a half at once and not be seriously influenced, and to them in emergency this dose may not be too considerable. Its repetition must, of course, be considered with more care.—*College and Clin. Record*, June, 1888.

Saccharine.—This interesting chemical product, which attracted so much attention when its properties were first announced, has been the subject of continued investigation in order to determine whether or not it has any therapeutic value. The result of these investigations seems to indicate that it is to be regarded as a condiment rather than as a medicament.

An elaborate paper in the Gazette Hebdomadaire May 18, 1888, by M. Charles Eloy, traces its history from the year 1879, when it was first isolated by Fahlberg, of New York, to the present time, and shows its physiological properties to be almost *nil*. It does not appear to modify any of the functions of animals to which it is administered, and it escapes from the body in the urine without interfering with any of its normal constituents. It, however, has a tendency to prevent fermentation, and to delay the metamorphosis of starch into glucose by the action of ptyaline or of pancreatine. Urine and feces containing saccharine do not ferment or become putrid as rapidly as those which are without it.

The hope that saccharine would prove of value in the management of diabetes mellitus has not yet been confirmed by experience; for in a number of cases it has soon excited disgust or given rise to symptoms of dyspepsia. It seems also, at times, to cause purgation. For this reason, saccharine must be used with discretion in cases of diabetes, and its use must be discontinued if it gives rise to gastric disturbance. If indigestion is a marked feature of diabetes, the use of saccharine seems to be absolutely contra-indicated.

In regard to its antiseptic properties, nothing of importance is yet decided. The natural hope that an antiseptic which is so largely eliminated from the body by the kidneys would prove of value in the treatment of cystitis, has not come to fruition as yet; and in no other respect has saccharine been shown to be superior to other and better known antiseptics. As an addition to distasteful medicines the results obtained have also been disappointing; and there is some reason to fear that when added to sour wines, to sweeten them, it is to be regarded as an adulteration.

These conclusions in regard to saccharine need not be regarded as final; for further observation may reveal new ways in which it may be used in commerce or in medicine; but as yet it cannot be said to have won a very high position in either of these fields.—*Med. and Surg. Reporter*, June 23.

Exploratory Catheterization of the Male Ureter.—The surgeon not rarely meets cases of pyelitis or destructive renal disorder in which he is puzzled to know with certainty which kidney is affected; or, having found the diseased kidney, he may feel a doubt whether the patient has another one.

In order to settle these questions positively, it is necessary to make an exploratory laparotomy, or to introduce a catheter into one of the ureters, and draw off the urine secreted by a single kidney. The expedient of compressing one ureter by means of instruments introduced into the bladder or rectum, has not been very satisfactory, and the catherization of the ureter *via* the urethra is only possible in the female. The introduction of cystoscopes hardly helps the matter in the case of the male.

The well-known surgeon, Dr. Axel Iversen, of Copenhagen, describes in the Centralblatt für Chirurgie, April 21, 1888, a case in which he successfully catheterized the male ureters by means of a supra-incision into the bladder.

The patient was an adult, who for some time had suffered from evidences of purulent inflammation of a kidney. No signs or symptoms were present, however, to tell with certainty which organ was affected. The bladder being opened by an epicystotomy after the method of Guyon, an electric light was introduced, and the ureters successfully catheterized. From the right was drawn off a fluid containing some

blood-cells and casts, but no pus; from the left almost pure pus was obtained.

The wound healed without any trouble, and the diagnosis was made. Unfortunately the knowledge did not greatly profit the patient, except, perhaps, in preventing an experimental operation. The right kidney was thought to be too seriously diseased to justify nephrectomy or nephrotomy on the left. Dr. Iversen considers the exploratory epicystotomy perfectly safe, and believes that in some cases it may be of the most essential service in directing the work of the surgeon.—*N. Y. Medical Record.*

Antipyrine in Sea-sickness.—Not long ago there was an animated discussion at the Academy of Medicine of Paris introduced by a communication of M. Ossian Bonnet, who maintained that antipyrine was the best remedy for sea-sickness. A few days later M. Aubert suggested that the departure of the French delegates to the French Association for the Advancement of Science, to be held at Oran, Algeria, would be a very good occasion upon which to try the efficacy of the drug. We now learn from the Bulletin Médical, May 20, 1888, that M. Etienne Rollet, one of the Lyons internes, went with the delegates to Oran, and, not being attacked with sea-sickness himself, was able to study carefully what took place among his companions. It is amusing to learn that the passengers, who repaired in large numbers to the Congress, set sail at four o'clock in the afternoon, and at six o'clock, when at least sixty had taken antipyrine, only four remained at table to finish their dinner! This was as true of those who took the antipyrine two or three days before embarking, as of those who deferred taking it until their arrival on board the vessel. On the return from Oran, M. Rollet was able to prove that antipyrine has no action upon sea-sickness. As an impartial observer he concluded that antipyrine could not be counted on, when administered by the stomach in the usual doses, either as a means of treatment during the attack or as a preventive of sea-sickness.

If M. Rollet's opinion is confirmed by subsequent observers, no more can be said than that antipyrine has failed where almost every drug in the pharmacopœia had been tried and found ineffectual. We may still hope that antipyrine will prove useful in some cases in which other drugs have failed, and come to be counted as one of the drugs which may with propriety be tried in the treatment of sea-sickness. The susceptibility of different persons to this disorder varies so widely, and the reasons for this variation are so little understood, that it is not to be expected that any one drug will be found equally serviceable in all cases.—*Medical and Surgical Reporter*, June 23, 1888.

Oxalate of Cerium in Sea-sickness.—In the Medical Record for June 2d, I have read with pleasure an article on the use of oxalate of cerium in sea sickness. For the benefit of those who suffer from that malady, I wish to offer my testimony also.

The value of oxalate of cerium in sea-sickness has been known to me for years. Its application suggested itself from its supposed physiological action. I had never heard of its use by any other physician until the reading of the article above-mentioned. After repeated experiments on myself and others, I am satisfied that it will relieve more cases of sea-sickness than any remedy yet suggested. I have tested its efficacy both in coast and transatlantic voyages.

Last summer I crossed the ocean with a party of friends. One of the number proved perverse, and would not take the remedy I offered. As the passage was somewhat rough, she was rewarded by being confined to her state-room during nearly the entire voyage. Another member of the party, hitherto a hopeless victim of sea-sickness, who had, in crossing the ocean fourteen times, made use of every known remedy without benefit, obtained decided relief from the oxalate of cerium. Two others, not "good sailors," took it regularly, from the time of going on board until the motion of the steamer ceased to be unpleasantly suggestive, and were kept from any serious symptoms, omitting, in all the passage, but one meal on a stormy night.

The best results were obtained by fifteen-grain doses given every two hours. It can easily be taken dry, on the tongue, and I believe this administration is the most effective. —M. M. Waldron, M. D., in the *Medical Record*, June 23, 1888.

A New Antiseptic Surgical Dressing. —China grass is a soft, silky, very highly absorbent fibre, used in various manufactures. The combings form an elastic silken wool, which, when treated with four per cent. of salicylic acid, provides an excellent antiseptic absorbent surgical dressing. It is also relatively much cheaper than, so far as I know, any of the usual dressings used in surgery. I have now given it an extended trial, and, supported by the opinions of most of my medical friends, have ventured to bring it before the notice of the meeting of the Leeds and West Riding Medico Chirurgical Society. Its chief value is the way in which it absorbs discharges from a wound, rendering it very dry, and preventing the poulticing of the wound, as it were, when bathed in discharges under less absorbent materials. A considerable quantity is required in cases where the discharges are free, and it is perhaps well to interpose some open-meshed gauze between the dressing and the wound, so as to prevent the China grass from sticking to the wound when removed. I have also observed that under the pressure of bandaging the material still retains its absorbent qualities, and does not cake when properly teased out before use.—H. Bendelack Hewetson, M. R. S. C., in the *Lancet*, June 32, 1888.

Foreign Appreciation of American Pharmacy.—European recognition of the excellence of the products furnished by several of our American manufacturing pharmacists is a matter that we have often taken pride in mentioning. One of the most recent evidences of the growing appreciation of our pharmacy abroad we find in a notice of one of Messrs. Parke, Davis & Co.'s publications, in the Deutsche Medizinal-Zeitung, of Berlin. Not only is the publication in question well spoken

of, but the various preparations made by the Detroit firm are praised, especially its "normal fluids," which are credited with an invariability of strength that is not really to be found in the fluid extract of the pharmacopœias, their strength being proportioned not to the amount of the crude drug employed, but to the richness in alkaloids or other medicinal proximate principles of that amount of the drug of standard excellence.—*N. Y. Med. Journal*, June 23, 1888.

THUYA OCCIDENTALIS IN THE TREATMENT OF DERMOID VEGETATIONS AND EPITHELIOMATA.—The tincture of thuya occidentalis applied with a camel's hair brush to vegetations, such as condylomata, the simple chancre, and even epitheliomata, has occasioned considerable benefit. The vegeta-tions do not disappear but become smaller and softer. Vegetations developed on mucous surfaces, on the contrary, disappear entirely under the influence of the tincture given internally. Very good results were obtained in the treatment of epithelioma of the cervix when the drug was given internally, employing it at the same time as a topical application. M. Baratoux recognizes the value of the drug in epitheliomatous affections of the larynx and pharynx. He gives the tincture in 20-drop doses and upwards; paints the diseased areas, then sprays them with a 1-20 solution in glycerine. The discharge loses its fœtor and becomes scanty, while the growth diminishes in size.—*London Med. Recorder.*

TREATMENT OF EPILEPSY BY MEANS OF THE ACTUAL CAUTERY TO THE SCALP.—The experiments were carried out on ten adult patients suffering from some degree of hemiplegia, due to a cerebral affection which had preceded the convulsive symptoms. These may be grouped under two heads—(1) those in whom the convulsions commenced in one of the paralyzed limbs and which corresponded to the so-called 'Jacksonian epilepsy'; (2) cases of ordinary epilepsy without any marked localization of the convulsive movements and without local aura. The method of revulsion employed in all the cases consisted in the application of ten or fifteen light touches with the actual cautery, never severe enough to give rise to suppuration and repeated every two or three days, applied to the region of the scalp corresponding to the psychomotory area. In eight out of the ten cases a more or less marked diminution in the number of attacks was obtained.—*London Med. Recorder.*

PREVENTION OF SEA-SICKNESS.—Sea sickness follows the motion of the vessel. As the good ship, or bad, heaves, so does the luckless passenger seem to loose grip of his existence, and this, according to DR. J J. LEISER, is because the respiration is unconsciously kept in time with the motion of the ship. Given regular respiration and there will be no sea-sickness. DRS. STOCKMAN and PRENTICE, of the s. s. *Etruria*, have tried how carefully regulated breathing affected persons suffering with *mal de mer*. Each doctor took five patients to the most dreadful part of the deck and got them to breathe regularly at the rate of 20 inspirations per minute, and at the end of an hour the active symptoms had abated. This result was a sufficient inducement for the sufferers to pay attention to their breathing, and so long as they did this they had no sea-sickness. The experiment is worth trying.—*Chemist and Druggist.*

APPLICATION AND DOSE OF PHENACETINE.—Professor Rumpf, of Bonn, in a paper read before the Cologne Medical Society last month, gave his audience some account of his experience of phenacetine. The conclusions to which he came were that phenacetine is free from any unpleasant effects, and that it acts with remarkable certainty as an apyretic, the dose being, for adults, eight grains and for children from three to four grains. In doses of fifteen grains it is valuable in neuralgia, (*a*) where the affection is due to vaso-motor disturbance, (*b*) in lancinating pains of tabes and neuralgia due to chronic neuritis, and (*c*) as a palliative in other forms of neuralgia. Being insoluble, phenacetine may be administered in capsules or it may be placed dry on the tongue. Professor Rumpf has never found nausea, vomiting, failure of the heart's action, or cyanosis following even fifteen-grain doses. — *London Lancet.*

THE TREATMENT OF GALL-STONES.—ROSENBERG, at a recent meeting of the Berlin Medical Society, stated that upon an American suggestion he had treated with large quantities of olive oil a patient, who, for five years had suffered with attacks of nephritic colic, and had in vain used the most various remedies. The patient took on several evenings, without marked discomfort, from 3 to 5¾ ounces of olive oil, followed by some Cognac, and after the first dose passed 3 calculi, after the second, 243. In all, 26⅓ ounces of olive oil were taken, in five doses, and 629 calculi counted in the stools; subsequently to which the gall-bladder, which had previously extended markedly beyond the margin of the liver, could be no longer palpated. According to the views of American physicians, the usefulness of the olive oil depends upon its entrance into the gall-bladder and softening the calculi.—*Wien. medizin Presse*, May 20, 1888.

INTRA-PULMONARY INJECTION OF CREASOTE.—Dr. T. Stachiewicz, of Görbersdorf, has followed up the attempts to arrest tuberculosis by deep injections of creasote into the substance of the lung, which met with such favorable results in the hands of Dr. Rosenbusche (see the Lancet, p. 943, March 31st, 1888), but without being able to show such good effects; indeed, in one case fever and hæmoptysis came on, and the cough and expectoration increased. Notwithstanding his unpromising results, Dr. Stachiewicz is disposed to think that intra-pulmonary injections of creasote may perhaps be of service where the cavities are superficial, or where there are hydatids or gangrene of the lung, and he suggests that it may perhaps be resorted to in some desperate cases of phthisis merely as a last resort.—*London Lancet.*

The Medical Age.

Vol. VI. DETROIT, JULY 25, 1888. No. 14.

Original Articles.

PICHI IN VESICAL IRRITATION.

BY OSCAR S. ARMSTRONG, M. D., DETROIT, MICH.

About three years ago in an article in the Therapeutic Gazette, DR. WYMAN called attention to the use of fluid extract of pichi in irritable and inflammatory conditions of the bladder. Since then I have used this remedy in thirteen cases, varying from slight irritation with desire for frequent micturition to intense inflammation of the bladder, and never without benefit to the patient. Personally I have derived more practical aid from the report of the therapeutic application of various remedies than in almost any other way, and hope the following cases may aid in establishing the reputation of a valuable drug. As my time is limited I select a few of those illustrating its value:

Case 1.—On May 17th, Frank R., farmer, æt. 26, consulted me for pain over bladder with desire to urinate every half hour. Thinks the difficulty began from having his feet continuously wet and cold, caused by standing in a ditch, which he was digging some eight months ago. Has been taking patent medicines or under the care of a physician ever since. Has lost appetite, flesh and strength, and feels feverish and languid most of the time. Gets up probably half a dozen times during the night to urinate, and sleep is restless, and does not refresh him. Has noticed that the urine seems milky. Tongue thickly coated, with dirty-white fur; bowels constipated; pulse, 110; temperature, 99.2°. Examination of urine shows sp. gr. 1032, reaction alkaline, color reddish-white; albumin, mucus, pus and vesical epithelium abundant. Says nothing he has taken has done him any good, and does not want to take any more medicine unless I am sure it will benefit him. Gave him calomel, gr. x, in divided doses every two hours till free catharsis produced. Inf. buchu, potass. citrat., tinct. opii camph., etc., were prescribed in appropriate doses and rest in bed enjoined. Bland drinks as barley water, flaxseed tea, etc., were advised to be taken freely.

May 19th.—No particular improvement except sp. gr. is 1028 owing to increased amount of urine being voided, and thinks there is not as much pain. Treatment continued.

May 22d.—Patient the same, although urine does not look so cloudy. Prescribed copaiba, gtt. x; tinct. opii camph., gtt. xv, in form of an emulsion every six hours and salicylic, acid gr. x three times a day.

May 24.—No apparent change. Discontinued copaiba. Substituted fl. ext. buchu, gtt. xx; liquor potass., gtt. x; fl. ext. gelsemium, gtt. vii; elixir calisayæ, ʒ ss every six hours. Salicylic acid discontinued and constipation relieved by pil. cath. co., two every other night at bed time.

May 27.—Urine increased in quantity and sp. gr. 1027. Albumin and pus about the same as at last visit. Patient has to lie in bed or on a couch most of the time, as he has pain in the bladder when he tries to move about and has to urinate oftener. Feels very much discouraged. ℞ Fl. ext. pichi, elix. calisayæ, ää ʒ iss. M. Sig. Teaspoonful every three hours.

May 29, 11 A. M. To-day patient more hopeful as he only passed urine twice during the night and slept better than for a long time. Urine clear; sp. gr. 1023; reaction acid. Albumin, pus and epithelium very materially decreased. Pulse, 92; temp. 99°. Medicine continued.

May 31.—Much better. Pulse 82; temp. 98.3°. Urine is passed in larger quantities and only six or seven times in the last twenty-four hours. Continued same prescription four times a day for about one week longer when the urine was normal in every way except that the amount of mucus was yet excessive.

A few days later patient felt so well that he rode a distance of eighteen miles over a country road. The result was a return of the cystitis, which readily yielded to the administration of the prescription containing pichi. This was was followed by a tonic course of iron, quinine, etc., and patient has remained well and free from bladder-irritation since.

Case 2.—Joseph G., retired merchant, æt 68, married. Has suffered for several years with irritation of the bladder, and estimates that he urinates every hour through the day and nearly as often during the night. Says he feels weak and nervous. Pulse 94; temperature normal. Examination of urine: sp. gr., 1015; reaction acid; no albumin or pus, mucus abundant and small quantity of vesical epithelium.

Prescribed fluid ext. pichi, ʒ ii; liquor potass. ʒ v; tr. nuc. vom. ʒ ii; elix. calisayæ q. s. ʒ iv.

Sig. Teaspoonful in hot water every four or five hours.

By the use of this prescription the patient was so much improved that he only voided his urine six or seven times throughout the day, and not oftener than once during the night, occasionally not being disturbed at all through the night. This gentleman was under my care for about one year, and although I tried various other remedies none seemed to give the relief that was obtained from pichi.

When last seen he got along nicely on one or two doses each day, and sometimes took none of the medicine for several days, but when this happened there was sure to be an increase in his urinary troubles.

Case 7.—Mrs. W., æt. 27, married, mother of one child; chronic cystitis followed an attack of peritonitis, the latter caused, as I believed, by induced abortion. Frequent desire for micturition, slight burning pain in meatus, tenesmus, and feeling of heaviness over bladder. After a thorough use of the usual remedies, such as buchu liquors and citrate of potash, etc., and my patient obtaining but slight relief, I prescribed the mixture which I had used in Case 2. Three days after beginning its use she walked to my office, a distance of about a dozen blocks, without inconvenience or any untoward after-effects. Her improvement commenced on the first day she began taking the pichi, and continued uninterruptedly until entirely well.

Case 10.—Mrs. P., widow, æt. 53. This lady has been subject to occasional attacks of cystitis for a number of years, and, as she expressed it, "nothing seemed to do her much good." Sometimes the difficulty would last her with variable degrees of severity as long as three months. Gave her ℞ Fl. ext. pichi, ℥ iss; glycerini, ʒ iv; elix. calisayæ, ℥ i. M. Sig.: Teaspoonful in water every three hours till relieved, then three or four times a day. She took three doses according to directions before bedtime, and had an undisturbed night's rest, notwithstanding that for several nights preceding she had to urinate every hour. The results were so unexpected by the patient that her gratitude was unbounded. By the time she had taken half the prescription she felt herself entirely well, and treasured the balance, as a miser his gold, for the next expected recurrence of her trouble. It came some two months ago, and the medicine again behaved in the same charming manner.

Case 12.—Mr. G., occupation manager of insurance company, æt. 47. Patient states that in February, 1888, he began to have a slight scalding pain in urethra when urinating, followed by tenesmus of the bladder and a constant ache across the lower part of the back. He used many home remedies, and was under treatment by a physician for several weeks, but instead of improving, the symptoms were becoming more aggravated. Denies ever having gonorrhœa or any venereal disease, though there is a gleety looking discharge much of the time. Has lost weight very rapidly, and has no appetite. Is sure he has "gravel" from what his friends tell him.

Gave him capsules containing ol. santal. et copaib, ää gtt. v., three times a day. At his next visit says pain in back is much better and urine does not smart as before; no improvement in appetite. Continued capsules, and also ℞ Potass. bicarb., ʒ i; tr. nuc. vom., ʒ iii; tr. calumbæ, ℥ i; elix. calisayæ, q. s. ℥ iii. M. Sig.: Teaspoonful in wineglassful of water an hour after each meal. A week later no improvement, and pain in back is worse again. Concluded to try the pichi, and accordingly prescribed ℞ Fl. ext. pichi, ℥ ii; liquor potass., ʒ iv.; glycerini, ʒ iv.; elix. calisayæ, q. s. ℥ iv. M. Sig.: Teaspoonful in hot water every six hours. Four days after there was no irritation; he was urinating four or five times during the day, and slept interruptly through the night. Pain in back had disappeared entirely, and he looked and felt more cheerful than at any time since I first saw him. He says in a few minutes after taking a dose he feels its good effects. He took the medicine in all about twelve days. His appetite is good and he is gaining in weight. It is six weeks since he has taken any of the prescription, and feels entirely cured. Lately I have given the medicine in hot water, as it does not precipitate, has a less disagreeable taste, and its good effects are apparent sooner.

CLINICAL LECTURES.*

BY HAL C. WYMAN, M. D., M. S., DETROIT.

EMERGENCY HOSPITAL AMPITHEATRE.

GENTLEMEN:—The past few days have been fruitful of accidents. Men have fallen from buildings, horses have runaway, children have been run down by teams and crushed beneath the wheels of wagons, men and women have caroused and fought, cutting and bruising one another. They have gathered to the hospital for repairs and will afford us some useful lessons in surgery. The house surgeon sends us this case with the remark that the ambulance picked the man up unconscious, and that he could not tell whether the loss of consciousness was caused by the blow the patient had received upon his head or by the drink he had indulged in. It is no simple matter to distinguish between loss of consciousness caused

ALCOHOLISM OR APOPLEXY.

by alcoholism and that caused by apoplexy, and when both conditions exist the diagnosis

* Prof. Principles and Practice of Surgery, Mich. College of Medicine and Surgery.

is made clear by lapse of time or the autopsy. One of the first lessons you will learn from this case is the value of the sense of smell to the physician who endeavors to make a differential diagnosis. You smell the breath and cutaneous exhalations from the patient and recognize the odor of whisky. Their is no mistaking the fact that this man is saturated with alcoholic liquors. The whisky we smell about our patient is the most important factor in enabling us to distinguish unconsciousness due to alcoholism from that due to intracranial hemorrhage, but we must not depend upon that alone. We must further examine the patient. These wounds must all be studied and if we find no fracture of the bones of the cranium we will feel certain that the patient is only drunk, "dead drunk" as people say commonly. That means drunk without being dead.

There are, as you see, several rents in this man's scalp. Notice the difference in them. What were they made with? Are they clean-cut like knife wounds? No. Some are almost stellate — that is, star-shaped — and have a bruised area about them, showing that some blunt instrument did the work. Probably a beer bottle was the weapon used. We examine each one with the tip of our finger so as to detect any unevenness in the surface of the skull that would be likely to be present in case of fracture. The finger is the best probe, always; especially if the wound is large enough to admit it. The metal probe may mislead by the character of the evidence it yields us. It often strikes the unevenness of a suture between the bones of the skull and leads us to mistake it for fracture. None of these wounds in its external appearance looks as if it could be the cause of intracranial disturbances which could account for the patient's loss of consciousness; and it still looks as if whisky held the fort. But we must not depend upon external appearances. There might be a fracture of the internal table of the skull without any depression of the outer table. The inner face of the cranial bones is so very brittle that one might easily fancy that it was especially designed to break under the most trivial blows.

Then, there is the fracture by *contre coup*, which means a fracture of the cranium at a point remote from the place where the blow was received. For example, a man falls and strikes on his head, the force of the fall may be expended in the cranium causing a fracture through the bone of the skull. A blow on the side of the head may cause a fracture by *contre coup* upon the other side. In those fractures through the bone of the skull or sphenoid bone, there is liable to be a bloody discharge from the ear, the nose is apt to bleed and there will probably be vomiting of blood which has passed down the throat. Sometimes after blood has discharged from the ear there be a discharge of clear, watery fluid which has escaped from the cavity of the skull through a fracture of the base of the skull.

In the present case we examine the ear and ascertain that the blood in the external auditory meatus ran in from the scalp wounds. By use of the ear speculum and reflected light, we can examine the auditory canal and see that both it and the membrani tympani are uninjured. Thus by excluding all symptoms of intra-cranial injury and the presence of a strong odor of whisky about our patient, we make the diagnosis of alcoholism. Our treatment is rest in bed, soup and a saline laxative. The scalp wounds we will dress with oakum and a firm bandage. Taking pains to wash them clean with a solution of corrosive sublimate of a strength of 2 parts in 1000 of water, and carefully approximating, cut surfaces so far as possible. We will avoid sutures, because the wounds are all contused, and the thread would irritate and be likely to act as a seton. Further, where the deep tissues of the scalp are bruised there is danger of extravasation of pus along the pericranium of the wound; it is closed so that there can be no drainage.

FEMORAL HERNIA—RADICAL OPERATION.

This colored woman is 54 years of age. She lives in the city, has raised a large family, and works hard. She has enjoyed good health with one exception, and that brings her here to-day. Her family physician, DR. ALDERMAN, says she has a femoral hernia, which has been reducible usually, but occasionally became wedged in the sack, requiring his services to dislodge or reduce it. Yesterday the hernia which had escaped from the truss she has worn, began to be painful. She could not reduce it. She called the Doctor, and he worked on it all night. Gave her chloroform, nursed her, gave emetics to relax her muscles, and tried taxis until he saw an operation was imperative. Here she is to have it performed. We examine the hernia and also look at the patient. Her expression is bad. Her eyes have a sunken look. Her pulse is small and quiet. The hernia occupies, as you see, Scarpa's triangle. We can move it about freely, but the most cautious taxis on our part fails to reduce it. Her general condition, anorexia, nausea and pulse make an operation urgent. While she is taking the anæsthetic we have our assistant sponge the hernial tumor with a wash of corrosive sublimate 2 per 1000. The skin in the neighborhood of the hernia must also be cleansed. Her clothing is removed and clean clothes prepared so that we may make the condition under which we operate aseptic. Now that she is fully anæsthetized, we make an incision through the integument and envelope of the hernia. The sack or peri-

toneal investment of the hernia we find vascular and firm. We raise it from the included intestine with forceps and divide it so as to introduce our finger. We feel the constriction in the femoral canal. Its sides are firm and tough. The gut and omentum cannot be forced back into the abdomen until we divide the constricting walls of the femoral canal. This we do by inserting carefully a probe-pointed bistoury alongside of the constricted intestine and omentum and turn its cutting edge against the ligament of Gimbernat. That is done and the bowel passes easily into the abdomen. The omentum is adherent in a mass too large to return to its normal position, so we include its narrowest portion in a ligature and amputate it. Now we have finished with the operation so far as strangulation is concerned, and we will try to close this wound so as to prevent a return of the hernia. We will attempt a radical cure. For that purpose we pull out the hernial sack if possible. But finding it very adherent we cut across it close to the femoral canal and with three catgut sutures sew the peritoneum and walls of the canal together. An antiseptic dressing is now applied and fastened with a piece bandage.

NOTE.—Six weeks after the operation the patient is well and the hernia has not reappeared.—H. C. W.

ANTISEPTICS IN OPHTHALMIC SURGERY.

BY D. H. WHITFORD, M. D., ELGIN, ILL.

Of all the uses to which antiseptics may be applied, there is none, perhaps, of greater importance than that relating to ophthalmic surgery, especially the removal of cataracts and enucleations. Having just discharged a patient after a splendid recovery from the latter operation, I will report the case. The patient came to me suffering with collapse of right eye-ball, with profuse suppuration of a very offensive character, of five days' duration. The wound was caused by running a pitchfork tine into the eye, entering just below and a little to the left of the iris, and penetrating the entire length of the ball, with a slight elevation of the point where it entered the bone just above the optic disk. The whole optical space was infiltrated with pus of a very offensive nature. The media having been broken up had escaped through the frontal wound, leaving the eye in a collapsed condition, making a somewhat difficult operation; and, on account of the offensiveness of the discharge, there was great danger of sepsis. Every known precaution was observed to prevent such a result.

The patient was placed in a room the temperature of which was 98° F., and the wound was washed with the following solution:

℞ Hydrarg. bichlor., gr. ij.
Acid carbolici., ʒ i.
Glycerini, ℥ i.
Aq. bull., q. s. Oij.
M.

This was allowed to boil a few moments, and then applied as hot as could be borne by the patient.

All the instruments used in the operation were devitalized by placing them in full strength alcohol and allowing them to remain in the same till used. All the sponges, mop-rags, towels, etc., were saturated with the corrosive sublimate solution, and it was thoroughly sprayed about the room.

The anæsthetic used was Squibb's chloroform. The patient took it kindly, and the operation, owing to the collapsed condition, lasted about fifteen minutes. After the operation, the wound was washed clean and a plug of absorbent cotton, saturated with a 1:3,000 solution of hydg. bichlor. with the addition of carbolic acid and sweet oil was inserted between the lids, the lids were brought together and bound with adhesive strips so as to keep a steady and equal pressure upon the plug. The antiseptic solution was ordered to be applied cold every two hours. The patient was seen and treated every day for five days, when he was discharged as cured. In all the five days succeeding the operation, notwithstanding the unfavorable condition of the eye previous to the operation, not a teaspoonful of matter or pus escaped; even the disagreeable odor disappeared immediately upon the application of the antiseptic, and at no time during the healing process could any offensiveness be detected. I have never met with a case of more perfect or rapid recovery after such an operation, and believe that to the thoroughness of the precautions observed is to be credited the favorable results. Believing no other plan of treatment would have been so successful, I shall never again attempt any serious operation without observing every antiseptic resource and prevent, if possible, the least approach of septic germs.

APHORISMS ON DISEASES OF CHILDREN.

The following aphorisms, compiled and translated from the French of E. BOUCHUT, by DR. CHARLES E. WARREN, of Boston, are given in the Philadelphia Medical Times:

1. Diseases of children resemble those of the adult, in location and name, but differ greatly in form, development, reaction and termination.

2. Age expresses the quantity and quality of vital force, as the figures on a dial indicate morn, high noon and declining day.

3. Before attaining an independent existence,

the new-born child must finish at the breast an existence, the first half of which has been passed in the womb of its mother.

4. New-born children have but little power to resist external influences, consequently a quarter of them die before the end of the first year.

5. New-born children may have, at birth, latent diseases, which do not develop for several days, weeks or even years. These are hereditary diseases.

6. New-born children and infants at the breast are a condition especially favorable to the development of certain diseases, especially ophthalmia, croup, eclampsia, diarrhœa, eruptive fevers, etc.

7. Disease is simply a "transformed impression;" that is, the manifestation in the body of external influences acting upon the body.

8. During the first influences, organic lesions are less frequently inflammatory than in the second infancy; suppuration of the tissues is less common, but more malignant.

9. Subacute and chronic forms of disease are less common in the infant than in the adult.

10. During the first infancy, there is no absolute relation of the organic lesions and the intensity of the symptoms.

11. High fever, accompanied with restlessness, cries and convulsions, may disappear within twenty-four hours, leaving no traces or after-effects.

12. The diseases of infancy usually present externally a series of symptoms sufficiently characteristic for their diagnosis.

13. During infancy, a yellowish tinge of the skin, sclerotic and base of the tongue always indicates disease of the liver.

14. Sudden and rapid blanching of the face and lips, with deeply-sunken eyes, is always a sign of grave intestinal disorder.

15. Cyanosis, unaccompaied with fever, is symptomatic of heart disease or the persistence of the foramen ovale.

16. Cyanosis, accompanied with fever and loss of sensation, is a sign of asphyxia, due to croup or bronchitis.

17. Sudden, momentary and intermittent flushing of the face, accompanied with fever, is a sign of acute cerebral disease.

18. Alteration of the features, by paralysis, successively of the eyelids, the nose and muscles of the face, with or without strabismus, indicates an affection of the brain; sometimes only of the facial nerves.

19. Distortion of the features, by great disproportion of the face and cranium, is indicative of chronic hydrocephalus.

20. An infant with fever, whose nostrils dilate and contract visibly, at each respiration, is affected with acute pneumonia.

21. An "aged" countenance, in a young child, is indicative of pulmonary tuberculosis and chronic enteritis.

22. Strabismus, accompanying fever, is indicative of acute meningitis (encephalitis), and will be followed by convulsions.

23. Primary strabismus, in a child otherwise healthy, is simply a localized muscular paralysis.

24. Redness and weeping of the eyes, accompanied with fever, indicate the incubation of measles.

25. An infant who is frightened at or attracted by an imaginary object, striving to escape from it or to grasp it, is threatened with some cerebral affection.

26. An infant, constantly having his hands in his mouth and biting his fingers, is troubled with difficult teething.

27. Children that cannot stand up at the end of two years, and whose superior fontanelle remains open, are rachitic.

28. A child who has rapidly lost his plumpness, whose cheeks are pale, soft and flabby, has had and perhaps still has diarrhœa.

29. The feeble cry of a new-born child indicates a low vital power and imminence of death.

30. A prolonged cry, very strong but intermittent, as a rule, indicates acute hydrocephalus.

31. A muffled, hoarse cry, is indicative of the last stage of croup.

32. A disproportionately large belly, in an infant of one or two years, indicates rachitis or chronic enteritis.

33. Jerky, sighing expiration, indicates acute pneumonia.

34. Inspiration, suddenly arrested at each effort by a convulsive or spasmodic action, indicates acute pleurisy.

35. A short, tremulous and incomplete expiration, followed by a long inspiration, in every eight or ten, indicates acute peritonitis.

36. Short, incomplete and murmuring respiration indicates simple or suppurative meningitis.

37. Deep respiration, occurring at long intervals, indicates delirium.

38. Deep, lateral constriction of the thorax, at each respiratory movement during fever, indicates acute pneumonia.

39. Permanent, lateral flatness of the thorax, with a series of chondro-costal nodes (the rosary), indicates rachitis.

40. At no other epoch in life is the heart so easily impressed and so variable as in infancy.

41. Mental impressions increase the movements of the heart as much as fever.

42. Increase of the movements of the heart, due to fever, is always accompanied by an increase of the body temperature, which differentiates the increase due to nervous impressions.

43. Fever manifests itself by an acceleration of the pulse and an elevation of the body heat.

44. Fever, present or past, leaves upon the tongue of an infant a red "pile," due to the turgescence of the capillaries and papillæ, (so-called villous tongue). This is the last trace of the organic movement.

45. An infant having a sad and downcast countenance, peevish, crying easily, ever ready to lie down and sleep, biting his finger nails and lips, shaking his head, and striking his limbs against each other, has a fever.

46. Chills are extremely rare in nursing children.

47. In children, pallor and general coldness of the skin take the place of chills, with shivering in intermittent fever.

48. Profuse sweating does not occur in children suffering with intermittent fever; it is generally replaced by simple moisture of the skin.

49. Fever is always noticeably remittent in acute diseases of young children.

50. In chronic diseases of young children fever is generally intermittent.

51. High fever diminishes the quantity of urine, concentrating the solid constituents, rendering it irritating to the urinary passages.

52. Very high fever habitually stops the secretion of tears.

53. The body temperature, measured under the axilla, rises one to three degrees in acute diseases of children, under the exclusive influence of the fever, and not from any particular disease, exactly the same as in the adult.

54. Heat production is proportional to the vital force of the new-born.

55. Heat production dependent upon food and clothing is lost so easily, in weak and feeble children, that death, by cold, often occurs.

56. Heat produotion is very much lessened when there is induration of the cellular tissue of the new-born.

57. The eye is simply an expansion of the brain, in which one can often perceive, by means of the ophthalmoscope, lesions, which indicate those which are occurring in the brain.

58. The purpose of cerebroscopy is to discover, through the eye, that which is taking place in the cerebro-spinal system.

59. Whenever nervous troubles, paralytic convulsive, or otherwise, are accompanied by lesions of the pupil of the pupil, of the retina, or of the choroid, they are dependent upon a lesion of the brain, its meninges, or the spinal cord.

60. Every intracranial obstacle, of such a nature as to hinder the venous blood from entering the cavernous sinuses, causes in the retina certain troubles of circulation, secretion and nutrition, which are of value in diagnosis of certain diseases of the brain.

61. In certain diseases of the brain and of the cord, the great sympathetic exerts an influence upon the circulation of the retina, which produces quite marked lesions, easily ascertained by means of the ophthalmoscope.

62. Brief attacks of suffocation and asphyxia, suddenly occurring, without fever, ending with very sharp hiccough, indicate phreno-glottic convulsions, (spasm of the glottis).

63. Spasm of the glottis often ceases under the influence of an intercurrent disease.

64. Spasm of the glottis may be cured by change of air.

65. Spasm of the glottis, followed by general convulsions, is fatal.

66. Contraction of the muscles, tetanus of the extremities, without fever is due to a local affection of the muscular system.

67. Contraction of the extremities, accompanied with trouble of the sensory nerves and fever, is symptomatic of disease of the nerve centres.

68. Contraction, following eclampsia, is seated in the muscles.

69. Contraction of the extremities may lead to atrophy of the muscles, fatty degeneration of these tissues and articular deformities.

70. Contraction of the extremities often disappears under the influence of electricity.

71. Primary paralysis of one or more muscles of the trunk or limbs, accompanied with pain, is usually due to a local affection of the muscular system.

72. Paralysis of one or more muscles, following eclampsia, has its seat in the muscles.

73. Partial or general paralysis, following febrile convulsions is due to a lesion of the nervous centres or branches.

74. Muscular paralysis of children leads to suppurative or fatty degeneration of the muscles and shortening of the limbs.

75. Any neuroses, whether paralytic, convulsive or spasmodic, may occur as sequelæ during convalescence from acute, inflammatory diseases, virulent or septic.

76. Idiopathic paralysis often occurs, after the cure of an acute disease, in the course of the convalescence.

77. When an acute, inflammatory disease, virulent or septic, has ceased, and a simple muscular or sensory paralysis manifests itself, it is an idiopathic paralysis, independent of any organic alteration of the nerves of the brain.

78. Typhoid fever, variola, erysipelas, dysentery, simple angina, bronchitis and pneumonia are sometimes followed by essential paralysis.

79. Of all essential paralyses, developed during convalescence from acute diseases, the most frequent is diphtheritic paralysis.

80. Diphtheritic paralysis often begins at the velum palati and pharynx.

81. Paralysis resulting from diphtheria and

other acute diseases appears sometimes in the paraplegic form, sometimes in a general, progressive paralysis, passing from the inferior extremities to the superior and accompanied with amaurosis and deafness.

82. Limited, essential paralysis is never fatal.

83. Essential paralysis, following an acute disease and involving the muscles of the trunk and the diaphram, is almost always fatal.

84. Most cases of essential paralysis may be cured, in the course of several months, under the influence of good nutrition and tonics.

85. During the first infancy, hallucinations and convulsions take the place of delirium.

86. In young children hallucinations are characterized by movements of fear and attempts to ward off or grasp an imaginary object.

87. Convulsions, called eclamptic, are due to a direct or sympathetic disturbance of the nervous functions, primary or secondary.

88. Eclamptic convulsions occur without any appreciable material lesion of the nervous system.

89. Eclampsia is usually hereditary.

90. The first attack of eclampsia predisposes to a second.

91. A convulsion occurring suddenly and of brief duration, not followed by fever, is without danger.

92. Eclampsia occurring during the first infancy and continuing through the second, will become epilepsy.

93. Eclampsia engenders partial paralysis, and this in turn engenders deformity.

94. Convulsions of a violent nature, followed by prolonged coma, but without fever, are suggestive of epilepsy.

95. Convulsions, occurring suddenly and accompanied with fever, are always symptomatic of the beginning of an eruptive fever, or of pneumonia, and are prognostic of great danger.

96. Initial convulsions, in variola, augur well for the definite termination of the disease.

97. Convulsions terminating an acute or chronic visceral lesion are almost always indicative of a lesion of the brain and its meninges, consequent upon the disease.

98. Eclampsia quite often engenders albuminuria.

99. Convulsions complicating an acute disease are of very grave portent.

100. Convulsions complicating pneumonia are fatal.

101. Fresh air and water sprinkled upon the face may abort an attack of eclampsia; but after the convulsions have commenced they cannot be arrested.

102. Those who pretend to cut short an attack of eclampsia by the aid of drugs, resemble those who by shaking an hour-glass attempt to hasten the inevitable and measured flow of sand. The cause of eclampsia must be ascertained if its return is to be prevented.

103. Tubercular meningitis is a special disease of children; the same is true in a degree of simple meningitis.

104. Tubercular meningitis always occurs in tuberculous or scrofulous children, or the issue of parents tainted with tuberculous lesions of the skin, bone, lymphatics or viscera.

105. Tubercular meningitis announces itself, a long time in advance, by lack of appetite, periods of sadness or anger, dejection, fright and nocturnal hallucinations.

106. Vomiting, constipation, and high fever, accompanied by short, incomplete, intermittent and sighing respiration, indicate meningitis.

107. Sudden flushing of the countenance, followed by pallor, alternating at short intervals during the fever, indicate approaching convulsions.

108. Fever, accompanied with extreme sensibility of the eyes to light and permanent closure of the eyelids, without ophthalmia, indicates meningitis.

109. Tubercular meningitis, accompanied with acute cries and convulsions, is almost invariably fatal.

110. "Snuffling" is a sign of acute or severe chronic coryza.

111. Coryza in the new born, which produces an obstruction of the nasal fossæ, is often fatal by reason of the difficulty which it presents to nursing.

112. Owing to the extension of its lesions, syphilitic coryza is the most difficult to contend with of any inflammation of the mucous membrane; but in its early stages it is more easily treated.

113. Croup exists when a yellowish, viscid membrane appears, covering the mucous membrane of the larynx.

114. A muffled, hoarse and hollow cry, followed by metallic wheezing, accompanied by fever and shortness of breath, is symptomatic of croup.

115. In croup, an attack of suffocation, asphyxia and death, is imminent, when the cough and voice is suppressed and the respiration is noisy and grating.

116. Croup may be simple, or it may be complicated with scarlatina, more severe in its character, or with diphtheria, and is then rarely curable.

117. There is, in croup, a simple albuminuria, an albuminuria scarlatinosa, and an albuminuria diphtheritica.

118. As long as anæsthesia does not accompany croup, asphyxia is not threatened, and there is no great obstruction to the air, in the air passage, or to aëration of the blood.

119. To open the trachea of a child, suffering with croup, before the appearance of asphyxia,

is a useless operation, because it is an attempt to combat a symptom which does not exist.

120. In a case of croup, asphyxia may be apparent, with cyanosis and suffocation, or latent, with no appreciable cyanosis or suffocation; loss of sensation alone, shows imminence of death and the necessity for tracheotomy.

121. Croup that has reached the stage of suffocation and complete anæsthesia, is almost always fatal.

122. There are some cases of croup that are self-limited and others that the physician limits.

123. In the beginning croup ought to be treated by emetics, frequently repeated and in large doses.

124. Croup, accompanied with diphtheritic albuminuria, is usually more severe than other cases.

125. A case of croup that has reached the period of suffocation and anæsthesia, when death threatens, ought to be treated without delay by tracheotomy, (or intubation).

126. A sudden attack of suffocation, occurring during the night, accompanied with a dry, hoarse wheezing and sonorous cough, characterizes false croup.

127. False croup, very violent in the beginning, diminishes in violence after several hours; while true croup constantly increases in intensity, hour by hour.

128. False croup is characterized by two or three attacks of suffocation, less and less violent, occurring in the course of twenty-four hours.

129. False croup is easily cured by emetics.

130. Moderate fever and a simple cough characterize acute brohchitis.

131. Acute fever, complicated with cough and difficulty of breathing, characterizes severe acute bronchitis, easily running into lobular pneumonia.

132. Chronic cough in children leads to pulmonary phthisis or tuberculosis.

133. Sibilant rales, accompanying cough in the new-born, are of slight consequence.

134. Mucous rales, in young children, are usually of slight importance.

135. A diffuse, subcrepitant rale, in new-born children and children at the breast, always indicates a very severe local affection.

136. Mucous and subcrepitant rales are, in children, the best indication for the use of emetics.

137. Some cases of chronic pulmonary congestion perfectly resemble, in their physical signs, pulmonary tuberculosis of the first degree.

138. Congestion of an asthmatic nature may be easily cured, but true tuberculosis does not succumb so easily to treatment.

139. Chronic pulmonary congestion occurs in infants as well as in adults, and results from an acute congestion, bronchitis, primary or secondary pneumonia, or from pulmonary effusion which has not entirely resolved.

140. A kind of pulmonary effusion of the character of an infiltration, destroying the elasticity of the parenchymatous tissues of the lung, and increasing its density so as to cause sclerosis, constitutes the pathological lesion in chronic pulmonary congestion.

141. While pulmonary congestion may exist alone, without tubercles, and may remain in this state without even becoming tuberculous; yet, on the other hand, it is quite often nothing less than the first stage of phthisis.

142. As there may be chronic glandular hyperemia in children, not followed by tuberculosis, so there may be chronic pulmonary congestion, constituting the sum total of the morbid state.

143. Chronic pulmonary congestion, or induration, should be looked upon with mistrust, since it may be the immediate forerunner of, and origin of, true phthisis.

144. Whatever the nature of pulmonary induration, congestive, phlegmatic, hemorrhagic or tuberculous, the aëration of the blood will be lessened, owing to the difficulty of access of air to the vesicles of the lung; and it will give rise to characteristic signs as determined by percussion and auscultation.

145. Chronic pulmonary congestion, in the scrofulous, necessarily leads to phthisis, but in the plethoric, rheumatic and herpetic, it remains in the indurated state until resolution takes place.

146. Nothing resembles the first stage of pulmonary tuberculosis so much as chronic pulmonary congestion, for the physical signs are similar and the general phenomena the same.

147. The physical signs of pulmonary congestion are, the relative dulness of the chest, weakening of the vesical murmur, prolongation of the expiratory murmur, some mucous rales and increased pectoriloquy. These signs are also generally regarded as characteristic of tuberculosis.

148. Cough, with or without expectoration, emaciation and general malaise, weakness, or attacks of fever, are the general symptoms of chronic pulmonary congestion.

149. Chronic pulmonary congestion may continue several months or years, yet may eventually be cured, if tuberculosis does not ensue.

150. Pulmonary tuberculosis in children is rarely cured; the greater number of cures claimed by physicians are cases of pulmonary congestion.

Correspondence.

GONORRHŒA AND CONCEPTION.

In the AGE of July 10, DR. CLARK refers again to the question of gonorrhœa and conception. In the first sentence of this article he says the question should be definitely settled if possible. 'Tis a consummation devoutly to be wished. But while any doctor can draw a line, to draw the line in this matter is a very difficult task. A living subject cannot be dissected to expose the condition of the uterus and its annexæ, and I am not familiar with any literature on post mortem dissections relative to this subject, that is critical enough to warrant the line being drawn. Any such line could be surrounded by such a multitude of facts as would deter a candid man from being too positive. Yet careful personal inspection with the aid of modern instruments of precision would certainly lead to much curious information.

Now if facts are of any good I will send a few for consideration; I could contribute a small volume from memory. Of the subjects, some are dead, some in England, some here and some scattered.

1st.—Mrs. K., English, 44, and married to a man who had developed into a notorious drunkard and adulterer. She was much emaciated and the papules, sore eyes, nose and lips which she presented too plainly showed her syphilitic condition. She had borne five children. She contracted gonorrhœa shortly after marriage and was probably never completely cured, as every child contracted ophthalmia neonatorum.

2nd.—Mrs. M., English, fresh and strong with dissolute husband. Four children, all well but the youngest. A year before her last conception her husband gave her the gonorrhœa. Four weeks after birth the child, a girl, had all the symptoms of clap, for which I treated it.

3rd —Miss R., English, was young and foolish, and she caught the clap. She married and bore several children, none of which lived, and several abortions

4th —Mrs. M. J. L., tall, of big frame, strong —an Amazon. She had borne six children, all alive. Her health seemed perfect. She kept saloon for years. She contracted clap after her second child was born.

5th.—Mrs O., handsome girl, was someone's mistress and got clap quite young. Married to a strong, vigorous man, and bore seven children

I am thus obliged, from the evidence which has developed in my experience, to believe that gonorrhœa is not a necessary preventive of conception, although it, unquestionably, does frequently so operate.

WILLIAM DUNSTONE, M. D.

HANCOCK, HOUGHTON CO., MICH.

MEDICAL SOCIETIES AND SOCIAL CULTURE.

The Medical Society of the County of Clinton, N. Y., in the year 1886 changed its usual order and gave permission for the semi-annual or July meeting to be held at some other place than the business center of the county, and decided to invite their families and friends to join them,

The first meeting under this rule was held at Lyon Mountain in the heart of the Adirondacks, in July, 1886, and was a success beyond expectation. A special train took them to the place of meeting, where, after the transaction of the business in hand, more than one hundred medical men with their families and friends were served with a sumptuous dinner. It was cheer upon cheer all around, and the doctors were the heroes of the hour, and when the train returned to town in time for the outgoing regular trains, the physicians in the county and their friends were better acquainted with each other than they had ever been before.

In July, 1887, the County Medical Society took the Steamer Magnum and went northeast across Lake Champlain to Swanton with their friends—over two hundred in number—where dinner was had and business transacted. All had a good time generally and returned as before in time for the out-going evening trains, every body saying "We'll all be on hand next July, sure."

In July, 1888, nearly the full membership of the Society with some four hundred, including their families and friends, took the Steamer S. Williams and made sail for Rouses Point on the Canadian border, where all had dinner, either at the hotels or from baskets, and then returned to the steamer, where, after transacting the business in hand, the sail was continued into Canadian waters to the complete enjoyment of the whole party, who arrived home as before in time for the outgoing evening trains. No body had to be in a hurry, and no body had to stay over.

The outcome of all this is the enlarged acquaintance of the physicians in the county with each other and with the people who patronize the profession. The physicians and their patrons who have attended these July meetings are all heard in regard to them to exclaim "*esto perpetua.*"

J. B. NICHOLS, M. D.

PLATTSBURG, N. Y.

The deadly coal-gas is being utilized in Paris to kill dogs. The vagrant animals are crowded into a close box into which the gas is forced, and allowed to remain for three or four minutes which is sufficient for the extinction of all signs of life. It is neater and quicker than drowning.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., JULY 25, 1888.

Editorial.

THE SUMMER DIARRHŒA OF CHILDREN.

The season of the bowel difficulties of children is about to open, and, indeed, the influence of the high temperature on the child and its food has already begun to show itself. The annual recurrence of this season finds us little better prepared for it than we were the year before, although, unquestionably, the aggregate advance of the past decade has been considerable. Still children sicken and die during the months of August and September in a manner poorly calculated to create a favorable impression of the resources of medicine. While we know that improper food, together with the bacteria and ptomaines of decomposition and fermentation are the *fons et origo malis*, the means at our control for preventing these and for counteracting their deadly influence, are not satisfactory.

We do not propose to enter into a dissertation on this subject at this time, and shall merely give a few suggestions which may prove helpful as such. If the physician conceives it to be his highest duty to prevent the summer diarrhœa among his clientele he will, regardless of pecuniary consideration (if he be thoroughly conscientious) spend most of his time in investigating their habitations and giving explicit instructions regarding the care of the food of the infant. The child which draws its pabulum from its mother's breast, conveys it to its stomach before it has a chance to become contaminated with the germs which swarm in unsanitary dwellings during the hot weather, but the victim of the higher civilization which is obliged to draw its life from the bottle, takes in with each suck the seeds of disease and death.

The law of the survival of the fittest receives abundant exemplification during hot weather, and the number of those who are unable to accommodate themselves to the environments of this advanced age, is legion.

In a recent article in the Medical Standard, Dr. Dessan, of New York, outlines a plan of treatment which the results of our experience prepare us to commend.

In the cases of milk-foods for artificial nursing, he says, it is the partial decomposition which has taken place, favored by heat, that in all likelihood causes abnormal fermentation to be continued in the stomach, with the constant development of ptomaines, in abundance, poisonous in their action, which produce irritation of the intestinal circulation. It has been demonstrated that diarrhœa caused by eating partially decomposed food has been checked by the use of sour milk, or its principal element, lactic acid. This may be explained either by the fact that one species of germ has the property of neutralizing the growth of another, or that an acid medium is unfavorable to their growth.

In these mild cases, the first object is to rid the stomach and intestines of the irritant matter, if there be any probability of its presence. This is best done with the old fashioned dose of castor oil, or what is less disgusting and perhaps more efficacious, a dose of calomel combined with sodium bicarbonate. For an infant under 1 year of age, give 2 grains of calomel and 3 grains of soda; from 1 to 2 years of age, 3 grains of calomel and 5 grains of soda.

Greater care is urged in the preparation of the food and attention to details, such as keeping the nursing-bottle thoroughly cleansed by scalding it out immediately after using, and keeping it filled (when not in use), with a solution of borax. The graduated nursing-bottle, is best, as it has no tube and is easier to keep clean. The nipple should be kept in a glass containing a solution of borax. All other utensils used in the care of children should be kept scrupulously clean.

For healthy children, deprived of the breast, or having a scant supply of mother's milk, there is nothing so good as pure cow's milk or some one of its products. Where it can be procured, as in large cities, Dr. D. prefers the fresh condensed milk, delivered daily, but otherwise unadulterated cow's milk will answer. Where there are previous digestive disturbances, the "malted milk" appears to be the best artificial food for infants.

In many cases, further therapeutic measures will hardly be needed, but if there be indications for such, give a combination of calomel, or mercury with chalk, and bismuth subcarbonate or subnitrate, either in powder or mucilage of tragacanth. The object is to restore the normal intestinal circulation by inviting the excess of blood to the liver, which is the principal compensating organ in the arrangement, and to check further irritation from the products of germ growth by the antiseptic action of the bismuth.

In the several forms of summer diarrhœa in children, depending partly on the effect of heat as already shown in the decomposition of food and furthermore upon foul air from filth ferm-

entation, and in a large degree, upon the direct depressing effect upon the cerebro-spinal nerve centers of prolonged heat above a certain degree, (more especially where this atmospheric condition obtains during the night) the chief aim is to overcome the exhausted state of the nerve centers, either by the use of cold baths, cold enemata, the hypodermic use of stimulants, as camphor, brandy, quinine in small doses, or chloral where there is a collapse as in cholera infantum. Cold baths at a temperature of 60° F., should be given where the body temperature as indicated by the thermometer is above 104° F. The bath should not be continued for more than five minutes, and rather less if there be a tendency to cutaneous congestion. The body is rapidly dried with friction from a coarse towel and afterward enveloped in a blanket to invite reaction. Cold drinks are given if there be much thirst, even if they are again vomited. For infants, under a year, iced toast-water is preferable. If the symptoms be severe, Dr. D. prohibits the use of all food other than the toast-water, barley water or albumen-water as may seem preferable, until amelioration has resulted. These are all given cold with cracked ice. Afterward it is better to begin feeding either with koumiss, kefir or matzoon; all of which preparations of fermented milk contain alcohol and carbonic acid gas.

In giving hypodermic injections the buttocks are the most eligible point of insertion. One grain of quinine or cinchonidine hydrobromide in solution, repeated once daily, as often as the body temperature rises above 103° F., one to three drops of camphorated oil, and five to ten drops of a 10-per-cent. solution of chloral hydrate make eligible injections. The hypodermics of chloral are used only in the severest cases of cholera infantum where there is marked and rapid collapse. It need not be repeated oftener than once or twice at hourly intervals.

If the diarrhœa be not attended with a high temperature nor other symptoms of heat prostration, but if severe, some one of the internal antiseptic remedies, as sodium salicylate, bismuth salicylate, naphthalin, or carbolic acid, may be employed; always clearing the bowels first with calomel and soda. Perhaps the best internal antiseptic, if it be such, in Dr. D.'s experience, in the treatment of the summer diarrhœa of children, is the corrosive sublimate. Especially is this true, if the large intestine be deeply involved, even to the extent of dysentery. Its best effects are obtained from the 1-100 to 1-200 of a grain, repeated every two hours.

In the stage of reaction from the severer forms of summer diarrhœa in infants, or what is known in the books as hydrocephaloid disease, where there is great restlessness due to cerebral anæmia, he gives the potassio-tartrate of iron as the best ferruginous tonic, and keeps the head covered with hot water applications. Diffusable stimulants are given at the same time. Small quantities of chloral are carefully given to allay nervous irritation, until the blood has become enriched with more corpuscles from the action of the iron.

Fresh air, preferably sea air, is advised on all occasions, and in the younger class of infants all shaking up in handling is strenuously forbidden, as the utmost quiet is all important.

THE PHYSICIANS' SOCIAL STANDING.

The question of the status of the medical practitioner in society is one of periodical recurrence abroad, and especially in England, and with each recurrence the undulations incident thereto reach our shores. We should judge from the tone of the English medical press that the English doctor is not content with his social position, and that he ascribes the inferiority which he feels to the feeling towards his calling which pervades English society. The barrister, the clergyman and the soldier (officer, of course) it is alleged, have the *entree* to higher apartments in the social fabric than the doctor, and the whyness of this thusness is the theme of many profound and labored articles from the pen of both editor and correspondent. Although we, in this country, may regard the matter as one scarcely sufficient to create the stir which it does, it is regarded by our British contemporaries as one fraught with much interest, and they regard it as of paramount importance that all the portals of that mysterious structure known as "society," be thrown wide open on their approach. In this country it is only snobs who would consume time and work themselves up into a condition of pyrexia on such a question, but it would not be just to so classify the English brethren, who have been brought up under a combined social and political system quite unknown under the freedom incident to a republican form of government.

In this country there are no grounds of complaint at lack of social recognition, on the part of the physician. When the physician here does not realize his ambition in the social sphere, the fault lies not in the stars but in himself ("'tis in ourselves that we are thus, and thus,") and members of the medical profession number quite as many social celebrities as may be found in the sister professions. A medical education neither makes nor unmakes a man's social standing, and the most profoundly educated physician who lacks general culture and pecuniary resources will, here as elsewhere, fail to make his mark in society. These latter are the requisite qualifications for social distinction, and if there should be thought, in the

minds of any the profession, to be a discrimination against them, they will on introspection discover the cause to lie in the lack of these. It has been said that it takes several generations to make a gentleman, and if this be so, it is too much to expect that the scores and hundreds and, perhaps, thousands who enter upon the study of medicine each year without the preliminary education, in either letters or manners, which is implied to be associated with the professions, shall receive recognition in the higher circles of society, where good education and that indefinable thing called "culture" are essential. It is barely possible that the English physicians who complain as above indicated, have neglected these requisites.

But financial standing, as we have intimated, is also necessary to that recognition, of the lack of which our English contemporary complains. While education and "culture" are essentials, their possession, to a superlative degree, will not prove the open sesame without a proper pecuniary backing. Constituted as "society" is in this age of the world, it takes money to run it. It is so closely associated with a good establishment as to be quite inseparable from it, and if the income of the average English physician is not greater than that of his cisatlantic contemporary, this fact, rather than the fact that he is a physician, is the cause of the inherently worthy's exclusion from the higher social circles. IAGO gave advice which our disaffected brethren must profit by if they would gain the goal of their ambition, in the social direction: "Put money in thy purse." The impecunious doctor must not permit himself to be tortured by an ambition to be a social celebrity. Let him stick to his last until at least he achieves the essentials to the new sphere to which he may aspire.

SLICK ADVERTISERS.

We Americans are wont to lay the flattering unction to our souls that what we don't know in the matter of business enterprize is hardly worth knowing, and we are disposed to regard the European as rather behind the times. While it is unquestionably true in some directions, that our transatlantic contemporaries are a trifle slow, it is very decidedly not so in others, and notably in the direction of advertising their wares to the medical profession are the European pharmacists away in the van of enterprize. In this country the prohibitory injunction of the Code of Ethics, against the prescription of anything which is covered by that commercial device known as a "patent," operates, in a large measure, to keep physicians who are jealous of their standing, from openly advocating in the periodicals through which they hold converse, the claims of anything which is thus protected. It is true this portion of the Code is fast becoming obsolete in so far as literal obedience to it is concerned, but the fact remains that it is there, and no one who values his reputation as a "regular" physician, dares to openly violate it. Like certain of the injunctions of the decalogue, undeniably proper for the conservation of society and family relations, it is violated without compunction, but with becoming secrecy, by many in high standing. These, while admitting its general salutary nature, satisfy themselves that an exception is quite permissible in their individual cases, provided always that the proper secrecy be maintained.

It was, doubtless, something of a revelation to most of the cisatlantic profession, to be informed that the majority of the newer drugs of European origin which have been introduced of late years and which have found so much favor, are patent medicines and on a level, from an ethical point of view, with the nostrums whose unequalled virtues are proclaimed in posters on fences, dead walls and all other points of vantage throughout the length and breadth of the land. The physicians of Europe are not bound down, like those of this country, by any cast-iron rules of conduct, and are simply required to demean themselves as becomes gentlemen. They are, therefore, allowed considerable latitude, and may judge for themselves whether a proprietary medicine shall enter into their prescriptions. The European manufacturers profit largely by this latitude, and of late years have freely availed themselves of the patent laws in securing a monopoly of their products. They know right well the very slavish subservience of a class of American physicians to the opinions of their European contemporaries, and this they utilize very neatly. When they are ready to place a new product on the market they first secure a monopoly of its manufacture and sale by means of the patent. This done they induce someone with a polysyllablic Teutonic name (the Teutonic has been most in favor of late years) to experiment with it and to report the result to his medical journal. The journal finds its way to our shores and the report of HERR VON STIEFELSTEINER, of Hessedarmstadt, is seized upon with avidity and published in the medical journals of this country, without any of the suspicion or inquiry which would have been instituted had the report been written by plain DR. JONES, of this country. The manufacturer's fortune is now made. He gets the "reading notices," and without number, all without costing him a cent, for which the domestic manufacturer importunes in vain in his efforts to lay the merits of his goods before the profession.

If we were in the pharmacy line we should send our new products abroad and have them brought before the profession of this country

in the manner above indicated. It is the cheapest and most efficacious way imaginable of introducing new preparations. Its success in hoodwinking the "Codists" has been established, and the humbuggery has not as yet been found fault with.

ANTIPYRINE IN LABOR.

The nostrum antipyrine is developing a field of usefulness of very extensive limits. The latest application of it is in parturition. DR. GRANDIN, of New York (N. N. Medical Journal) recommends it as an agent capable of relieving woman from the primal curse—the sorrow in which she was doomed to bring forth.

The excellent results yielded him by antipyrine in dysmenorrhœa and other affections where it is a question of nerve pain, led him during the past year to test it during the first stage of labor, and his results have been sufficiently gratifying to justify him in asking other obstetricians to try the drug. Possibly it has been similarly used by others, but if such be the case we have seen no record of their experience. DR. G.'s habit in regard to the administration of the drug is to give fifteen grains well diluted, and preferably with some stimulant, such as the aromatic spirits of ammonia, and to repeat the dose in one hour thereafter. In two hours after the second dose the patient receives ten grains, and so on every two hours if needed. Chloral, in fifteen-grain doses every three-quarters of an hour till three or four doses have been received, may be given in connection. The result of this combination has been to nullify the pains so much as to be in two instances scarcely perceptible, and in others simply uncomfortable. The progress of labor has not been at all interfered with, and neither the mother nor the child have presented evidence of injury from the administration of the antipyrine.

Notes.

A letter written by BILLROTH to a German editor with the stipulation that if it published it at all it must not appear until after the late EMPEROR FREDERICK'S daath, has just appeared. It is of interest not only in connection with the case but also because of its sentiments of general applicability:

"With reference to your request for my opinion on MACKENZIE, I can only reply that I have always warned people against passing a judgment on a man who, as a physician, occupies such a difficult position. I have never doubted the correctness of the diagnosis of my Berlin colleagues, but I have also never been abie to understand what political reasons had made it necessary to communicate this diagnosis to the world. It cannot be admitted that MACKENZIE with his vast experience has ever doubted the correctness of this diagnosis. If he behaved in such a way as to imply that he had some doubt about the correctness of this diagnosis, this could only be owing to pressure from above or from motives of humanity. I know such situations from my own experience. One is not inclined to disapprove the statement of one's *confrères*, but at the same time one is not inclined to tell his patient that his malady is incurable, for the known want of infallibility in medical diagnosis is almost the sole ray of hope to the unfortunate incurables. Falsehood in such cases becomes a moral act. The entire behavior of MACKENZIE must, no doubt, be judged from this point of view. He did as a man and physician what was still possible to be done when the unfortunate word 'cancer' had already been pronounced. In much the same terms as these I have on differennt occasions expressed myself as to MACKENZIE'S conduct. I ask you to consider this as a private communication, at least until the sad catastrophe has occurred in Berlin."

Gaillard's Medical Journal wisely remarks that "there are contrarities in every walk of human life, but a stranger one than that described it will be difficult to find. The inevitable tendency of the vast volume of sanitary work, done early and late, by every modern-minded physician is the abridgment of his field of labor and livelihood, because it manifestly reduces sickness and the medical demands of the community. The more conscientious and thorough a man is in the discharge of the sanitary phase of his self appointed duty, the more absolutely does he come in conflict with the material interests of his brethren and himself. Carried to its legitimate conclusion, we behold the singular spectacle of a body of specially trained men seeking, by its own unselfish exertions, to wipe itself out of existence. But let us not cross the bridge untimely; it will not come in our day. We are minded to give a brief illustration of the above, taken from the medical history of Queens County: It is told of old DR. ISAAC LEDYARD, a notable character who flourished in Newton a century or so ago, when there was a frequent passing of the social cup and much drinking of toasts; that when a sentiment or toast would be demanded from him, it was his wont to lift his glass and pledge the company in this wise: 'Here, my friends, is your very good health, and that is most consumedly against me.' If the good old doctor had survived until the days when sanitary science was discovered, he would have been found acting in like manner, as he phrased his toasts—at odds with his material interests."

Through the courtesy of the editor of the St. Louis Medical and Surgical Journl, we are able to reproduce for our readers the following sketch of the sample fiends at Cincinnati, which we think all physicians who were there will appreciate:

Death has entered the ranks of the profession with, perhaps, more than usual frequency during the past year. He has, at least, been gathering in an unusual number of prominent members. We have now to record the demise of J. MILNER FOTHERGILL, of London, a name familiar, through the product of its owners pen, to the English-speaking profession everywhere. DR. FOTHERGILL died suddenly in the prime of life (forty-seven). He was a singularly happy writer, possessing to an unusual degree the faculty of presenting dry facts in a taking garb. DR. FOTHERGILL'S life though short was intense. He worked his vegetative and his intellectual faculties at a high pressure. He was a *bon vivant*, of Herculean dimensions, and during his latter years suffered acutely from gout.

At home we have lost DR A. Y. P. GARNETT, of Washington, late President of the American Medical Association. DR. GARNETT was a man of marked individuality. He was born in Virginia in 1820, graduated in 1841, entered the U. S. Navy in the same year as Assistant-Surgeon, was promoted Surgeon in 1848, resigned in 1850 to reside in Washington, where he remained till 1861, when he cast his fortune with the Confederates, for whom he acted in the capacity of Surgeon-General during the war. He was the warm friend and physician of JEFFERSON DAVIS whm he accompanied after the evacuation of Richmond.

The sensitive rectum is now receiving attention among the neuroses, and we are treated to the description of a variety of aberrations of this gut. There is what has been called the "jealous" rectum, which puts a veto on social intercourse. One lady would be perfectly well and comfortable until she put on her things to go a visiting. Then her rectum would begin to audibly remonstrate in such a manner as obliged her to stay at home, when the jealous tube would relapse into peace and quiet. Another lady's rectum insists on being unloaded the moment it's owner receives a letter from her husband. And still another lady's rectum insists on an evacuation with every mental emotion. The possessors of the aberrant recti are obliged to remain at home and abandon all social intercourse. The remedy is a rather awkward one, but we are glad to learn that something has arisen which has in it a promise of the cure of the gallivanting habit which is playing such havoc with our homes. But nature is notoriously fundamental in her methods. But let us have the *mens sibi conscia recti*, even though the means be thus peculiar.

The Medical Examiner, of Philadelphia, in the year 1846 had the following anent the introduction of anæsthesia by sulphuric ether: "We should not consider it entitled to the least notice, but that we perceive, by the Boston Medical and Surgical Journal, that prominent members of the profession in that city have been caught in its meshes. We are persuaded that the surgeons of Philadelphia will not be seduced from the high professional path of duty into the quagmire of quackery by this will-o'-the-wisp. We cannot close these remarks without again expressing our deep mortification and regret that the eminent men who have so long adorned the profession in Boston should have consented for a moment to set so bad an example to their younger brethren, as we conceive them to have done in this instance. If such things are to be sanctioned by the profession, there is little need of reform-conventions or any other efforts to elevate the professional character. Physicians and quacks will soon constitute one fraternity."

It has been noted as a singular fact the frequency with which men who devote themselves to the special consideration of some particular disease themselves die of a kindred affection. The latest instance of the kind occurred in the case of J. MILNER FOTHERGILL. His studies

were chiefly in the line of the disorders of nutrition, and his graphic descriptions of the *modus operandi* of over feeding and other forms of dietetic excess have been read by thousands, who, doubtless, would imagine him to be the last person in the world to be afflicted through lack of attention to table hygiene. Yet he has for many of his later years been a sufferer from gout. He used to make a classification of persons suffering from gout and other nutritional diseases, into the Norse and the Arab type. He was himself emphatically a Norseman under this classification and should never have been transplanted to the city.

And what does this mean? We are told that at the late meeting of the American Medical Association, on motion of DR. N. S. DAVIS, of Chicago, the rule which requires members to subscribe to the Code of Ethics was abolished. The fact that such action was taken is we believe not generally known and the Kansas City Medical Index is entitled to credit for calling attention to it. It is significant of a desire of the Association to harmonize the profession with the advancing thought of the century. Certainly a more incongruous collection of dicta than that classed under the "Code of Ethics" could scarcely be conceived of. With the renunciation of this heterogeneous conglomeration the prospects of professional unity and harmony in this country grow brighter.

The good people of Amesbury, Massachusetts, celebrated the last Fourth of July by unveiling a bronze monument erected to the memory of JOSIAH BARTLETT, and peculiar interest was added to the event by the fact that the poet WHITTIER contributed a poem for the occasion. JOSIAH BARTLETT was a physician, but it was not to the memory of the Dr. that the monument was reared. He was a soldier and a statesman, and employed his sword and pen in the cause of the colonies during the struggle for independence. Had he served his country merely as a physician, no monument reared by a grateful people would have marked the grave which contains his bones.

DR. LOVELAND (Cincinnati Lancet Clinic) says: In America "Doctor" is a promiscuous title. The preacher is a doctor. The school principal is a doctor. The family physician is a doctor. The patent medicine man is a doctor. The dentist is a doctor. The veterinary surgeon is a doctor. The extractor of corns, bunions, and ingrowing toe nails, without pain or loss of blood, is a doctor, and so on. This is a free country. In foreign countries this is not allowed. In Germany an American dentist has just been fined for placing doctor on his cards. May the good work begun there cross the ocean and invade this country.

Behold how pleasant and how good a thing it is to be the physician in attendance on the great! The obscure doctor who, in spite of his skill and learning, has gone along for twenty-five or thirty years, unknown outside his own clientele of respectable mediocrities, is summoned to attend some one whom either *Dei gratia* or *vox populi* has elevated, when, *presto*, he himself becomes a celebrity! "As Æneas, our great ancestor, did from the flames of Troy upon his shoulder the old Anchises bear," so from the gloom of obscurity does the great politician bear to the full daylight of eminence, the every-day medical practitioner.

The Medical News, of Philadelphia, informs its readers that DR. CHARLES N. LEWIS, of Jackson, was elected President of the Michigan State Medical Society at the late meeting of that body. We, somehow or other, got the impression that DR. S. S. FRENCH, of Battle Creek, was elected to that high position.

A training school for male nurses has been opened in connection with the Bellevue Hospital, New York. A magnificent building for the purpose, costing $100,000, was donated by a MR. D. O. MILLS, who thinks he has done a great work. Time will test his faith.

DR. J. HENRY C. SIMES, of Philadelphia, reports, in the Medical News, a case of death following the injection into the urethra of a drachm of a twenty-per-cent. solution of cocaine muriate.

Modesty, simplicity and truthfulness are as cleansing virtues everywhere but at the bedside. There modesty is construed as a want of confidence, simplicity as hesitation, and truth as impoliteness.

Many eastern practitioners make their vacations profitable as well as pleasant by securing positions as physicians to leading summer resorts during the heated term. The plan is one which certainly commends itself.

DR. BARTHOLOW declares that it may not be generally known among physicians, but it is nevertheless a fact, that the bromide of lithium is almost a specific for muscular rheumatism.

Book Notices.

THE LANGUAGE OF MEDICINE. A Manual giving the Origin, Etymology, Pronunciation and Meaning of the Technical Terms found in Medical Literature. By F. R. Campbell, A. M., M. D., Professor Materia Medica and Therapeutics, in the Medical Department of Niagara University.
New York: D. Appleton & Co.
Detroit: John Mac Farlane.

The desirability if not, indeed, the necessity of a work of the nature of that before us must be conceded by all who are familiar with the

lack of knowledge which prevails in regard to the matter which it elucidates. For very good and sufficient reasons Latin and Greek are the languages of medicine, and we have no patience with those "practical men" who would displace them with the vernacular. Medicine is a profession and entrance to it should be through the door of an educational course of which the classics are a prominent part. The language of medicine is, moreover, so directly derived from the Latin and Greek that he who attempts to become familiar with it without a knowledge of the latter, studies mechanically and labors under a very great disadvantage. But, unfortunately, such knowledge is not an obligatory preliminary requirement in this country, and the ranks are being annually recruited with thousands who make the mistake of neglecting to lay the proper foundation of a medical education. DR. CAMPBELL aims in the book before us to remedy the defect, and to aid those who discover their mistake too late to make the best of it. He has done as well as could possibly be done when it is remembered that he is writing for those to whom Latin and Greek are literally dead languages. Those who study the book carefully will be enabled to study medicine more intelligently, and having been graduated will avoid the incongruities which now characterize the prescriptions of an incredible number of the profession.

THE APPLIED ANATOMY OF THE NERVOUS SYSTEM, being a Study of this Portion of the Human Body from a Standpoint of its General Interest and Practical Utility in Diagnosis. Designed for Use as a Text-Book and a Work of Reference. By AMBROSE L. RANNEY, A.M., M.D., Professor of the Anatomy and Physiology of the Nervous System in the New York Post-Graduate Medical School and Hospital; Professor of Nervous and Mental Diseases in the Medical Department of the University of Vermont, etc., etc. Second Edition, Rewritten, Enlarged and Profusely Illustrated.
New York: D. Appleton & Co.
Detroit: John MacFarlane.

The author very fully outlines the scope of his work in the title-page. He has shown great familiarity with the writings of the leaders in the field in which he is a worker, and does not hesitate to criticize their views when they conflict with his own. The work is an admirable compilation of the most advanced teachings in regard to the anatomy of the nervous system and will be secured by all whose reading takes this particular direction.

THE ESSENTIALS OF MEDICAL CHEMISTRY AND URINALYSIS. By SAM E. WOODY, A.M., M.D., Professor of Chemistry and Public Hygiene, and Clinical Lecturer on Diseases of Children in the Kentucky School of Medicine. Second Edition, Revised and Enlarged.
Louisville: John P. Morton & Co.

Those who are familiar with the first edition of this excellent little work will concede that there is nothing better adapted to the subject it has in view. The second edition amplifies somewhat and includes such matter as is necessary to bring it abreast of the times.

Therapeutic Brevities.

AMYLEN HYDRATE AS A HYPNOTIC.—Dr. Gurtler, of Königsberg (Berliner klin. Wochenschrift, No. 6, 1888), gives the results of its use in cases of alcoholism, epilepsy, morphinism, cerebral meningitis, spasmodic cough, cystitis, and other maladies. In these and other diseases he has found it act promptly and efficiently as an hypnotic.

The formulæ advised by Gurtler are as follows:

℞ Amylen hydrat., 7 parts.
Aquæ distil., 40 parts.
Syrup. rubi., 30 parts.

Or,

℞ Amylen hydrat., 7 parts.
Aquæ menth. pip., 40 parts.
Syrup. rubi, 30 parts
Ol. menth. pip., gtt. 1.

Dose.—45 to 90 grains of amylen hydrate for an adult.

—*Am Jour. Med. Sciences*, May, 1888.

SUPERFICIAL NEURALGIAS.—Here is Garretson's favorite application for superficial neuralgias, especially of the face:

℞ Aconitini., gr. ij.
Veratrini, gr. iv.
Olei tiglii, gtt. ij.
Olei olivæ, ʒ ij.

M. Sig.—Rub over the affected spot thrice daily.—*Medical Times.*

FOR CORNS AND WARTS.—

℞ Acidi salicyl.,
Acidi lact., ää 10 parts.
Collodion, 80 parts.

M. —Vomaka, *Pragische Rundschau.*

CATARRHAL CONJUNCTIVITIS —

℞ Salicylate of mercury, 0.50.
Distilled water, 30.
Carbonate of potassium, q. s.

M. For eye-wash.—*N. Y. Record.*

Medical Progress.

THE NEW HYPNOTISM—ITS METHODS AND ITS POSSIBILITIES.*—GENTLEMEN:—I am especially anxious to bring the subject of hypnotism before you to-day for two reasons: 1. Because it has recently been brought forward in a new manner by certain French physicians at Nancy—Drs. Liebeault and Bernheim, and at Zurich by Prof. Forel. 2. Because hypnotism in a modified form has been recently applied, practically, very extensively in this country by persons who claim to be "Christian Scientists," "Mind Curers," etc.

My object will be to-day to show some of the phenomena of hypnotism in the subject before me, and then to show that, by adopting the methods of suggestive medicine as taught by Bernheim and his school, we can accomplish in a safe and rational way all that is done by mind-curers and other like classes of charlatans.

HISTORICAL.

Hypnotism in medicine has been known for over a century. Its methods have been applied, however, mostly by quacks, and no very careful investigation of its methods or results has been made until of late years. Much of the recent scientific investigation has been done by Charcot and his pupils in Paris. Working at La Saltpetriére he has, however, had to deal chiefly with hysterical persons, and he has in consequence taught hypnotism in what I believe to be a misleading way. Indeed, I fear that all the works that have come out from his School on this subject have a decidedly erroneous element in them, and should not be adopted as guides in the study of this phenomenon. The study of hypnotism or suggestive medicine and its application has received its greatest practical impetus through the work of Liebeault and Bernheim at Nancy, and from Forel at Zurich. This work has been supplemented, also, by that of Fontan and Segard, of Toulon, who have written a manual on the subject which is called "Elements of Suggestive Medicine," a work not equal in originality and value, however, to one on the same subject by Bernheim.

The difference in the Schools of Paris and the Schools of Nancy and Zurich are very decided. The methods of hypnotizing people are different, their theories are different, and their practical applications of the process are different.

METHODS OF HYPNOTIZING.

Charcot adopts the old methods of hypnotizing—that of Braid—in which the person fixes the eyes upon a bright object until he passes off into a hypnotic condition. Bernheim and his pupils adopted what is known as the "suggestive method." The patient is placed on a chair in front of the operator. The operator then talks to the subjects in a firm and confident voice, assuring them that they will go to sleep in a short time, telling them to make no resistance—that their sleeping will be natural, that nothing will be done to worry or fatigue them, that they will dream pleasant dreams, that they will wake up feeling better; then that they are feeling drowsy, their eyes are heavy, objects look confused, the lids are falling, they are closed—in a moment more the patient goes off to sleep. This is the persuasive or suggestive method. It requires some little time—five to fifteen minutes. It may fail the first time and succeed the second. I will illustrate these two methods on the patient before us.

The difference between these methods, according to Bernheim and Forel, are fundamental in their effects. The method adopted by Charcot will sometimes throw hysterical and nervous persons into a state of spasm or hysterics; and this I am sure, is the case, because I have produced such results myself. On the other hand, the suggestive method, it is claimed, has no such effects and does not leave injurious after-effects.

NUMBER AND CHARACTER OF SENSITIVE PERSONS.*

Profs. Berheim and Liebeault find that, by their method, they can hypnotize 90 per cent. of their patients. Forel, after studying the work at Nancy, says he has been able to hypnotize at least 80 p. c. of his patients. The class of persons that are hypnotized does not include necessarily the hysterical or weak-minded, but includes healthy persons, and the condition of hypnotism as produced by suggestion is not an abnormal one. It is not a neurosis, but simply a form of sleep. Children and highly excitable hysterical persons and insane persons are rather less easily affected by this method than those with a sounder nervous constitution.

DEFINITION.†

Hypnotism is a peculiar mental condition in which the will power is suspended and the person is put in a state in which he has to respond to every suggestion that is made to him by the operator. The powers of his mind that are left are also in such a state that they can be concentrated in one or another direction very powerfully. There are therefore in hypnotism three conditions. 1. Suspension

* A Clinical Lecture Delivered in New York Post Graduate Medical School, April 25, Prof. C. L. Dana, M. D., and published in Nor. Car. Med. Jnl., June '88.

* The proportion of persons of all ages found to be hypnotizable by Beannis was about 18 or 20 per 100. Children up to the age of 14 are very susceptible. After the age of 55 susceptibility lessens. Men are almost as easily affected as women; but persons of a docile mind, and those trained to some degree of mental discipline and capacity for submission, such as soldiers and artisans, are more sensitive.

† It was abundantly shown by the experiments in this city, some years ago that the classical stages described by Charcot do not exist except by suggestion; however, there are different degrees in which the subject may be hypnotized, just as there are different degrees of soundness of sleep. And it should not be forgotten that *real therapeutic effects can be gotten even when the patient does not fall into sleep, and that the hypnotic state may not be one of actual unconsciousness.* The stages mentioned by Liebeault are: 1. The patient does not sleep, or close the eyes, or lose himself at all. 2. The patient is awake, but the lids are closed and cannot be opened. 3. One is of "suggestive catalepsy." 4. The patient cannot move his body spontaneously. 5. Contractions occur on suggestion. 6. Automatic obedience. In all the foregoing subject recalls what occurs after the seance is over. Three other degrees are described, after all of which the subject does not remember what has happened. These are called sonambulic states. These various degrees are not sharply defined from each other. They all have the common character, *not of sleep*, but of suggestibility. "Hypnotism," says Bernheim, "is the provocation of a peculiar mental state which augments suggestibility."

of will power. 2. The condition of automatic response to suggestion. 3. Concentration of mental force in various directions.

EXPERIMENTS.*

I will now illustrate some of the phenomena that this condition shows:

I can affect his sympathetic system, or organic system, only indirectly. I cannot by suggestion make his heart go faster or slower, or cannot by suggestion make his bowels empty themselves, or his skin grow white or red. I can indirectly, do this by acting on his feelings. In the same way one can apparently move or increase the power of the special senses—one can increase the sense of hearing or the sense of sight, so that persons can even count figures or see figures through the closed lids.

PRACTICAL APPLICATIONS.

The subject that I show here is what is called a trained subject—a man who has been hypnotized so often that he is hypnotized now very easily. He is a genuine case, however, and illustrates all the phenomena of well-marked hypnotism.

In applying hypnotism to other persons you will not so easily get out all these phenomena, but you can accomplish a good deal practically in the cure of diseases. You take patients in your office, put them through the suggestive method I have described—you suggest to them when in this state that they will have no more rheumatic pains, no more neuralgia, that they will have their menses regularly, that they will give up drinking or using tobacco, will sleep regularly, that the trembling or paralysis will grow less—you do this on several occasions and you will, in a pretty large per cent. of cases, relieve or cure functional or diathetic diseases. By using this method of the School of Nancy, applied in the way I have shown you, being very careful about giving it to hysterical women, imbeciles or insane, but confining it usually to persons of average sound nervous spstems, and applying it only in cases where you know there is no malignant disorder, you can accomplish the same results that the mind-curers and Christian scientists do, and you can apply the remedy in the proper cases. Here lies the great importance of this subject at the present time. I believe by the proper application of suggestive medicine in the hands of trained physicians, we can take away the ground from under the mind-curer and the faith healer and all that class of charlatans. I would not recommend this practice, however, except under great cautions. Watch the effect upon persons on whom you try it. Don't let the laity experiment on each other. Travelling mesmerizers and professional hypnotizers ought to be abolished. Hypnotism ought never to be used in private parlors—ought not to be made a toy or plaything. It can be made, however, as I have already said, not only useful in medicine, but perhaps it may be used in moral education and in correcting the morbid habits, such as those of tobacco, alcohol and opium.

Those of you who are interested in studying the more recent literature of this subject will find that very little has as yet appeared in English.

In French, there is a monthly journal devoted entirely to hypnotism in Reveu de L'Hypnotism, edited by Dr. E. Berillon, at Paris. There is an excellent summary of the present condition of "suggestive medicine" in a report of the Royal Academy of Medicine of Brussels.

Bernheim's work in French ("De la Suggestion), Paris, 1886. A new edition is just out. Bernheim has given a summary of his views in the Gazette des Hopitaux for March 27, 1888.

Fontan and Séquard's work ("Elements de Medicine Suggestion"), Paris, 1887, I have already referred to. Forel's contributions have appeared in the Munich, Medicin Wochenschrift, 1888, Nos. 5 and 13. Obersteiner has written a monograph upon the subject of Hypnotisms, Vienna, 1887. Ochoroweiz, "De la Suggestion Mentale," Paris, 1888. Dr. A. Hückel, of Jena, has also written a monograph with a fairly complete bibliography.

*Prof. Dana now waved his hand before the subject's face and caused him to pass into a profound hypnotic state. First, he produced hemi-anæsthesia, extending even to the eye, nose and sense of laste, so that quinine was tasted only on one side, anæsthesia stopping exactly in the middle line. Very marked motor disturbances were next produced, such as catalepsy and tetanic rigidity, the subject assuming and maintaining the opisthotonos position, holding any part of the body in a state of rigidity wherever it was placed, etc. The subject was then told that hideous forms were in the room pursuing him, which caused a very decided acceleration of his pulse, as proven by my watch, and came near making him escape over chairs and tables from the room. The physiological effects of various medicines held at a distance from the subject were experienced by him, such as emesis from ipecac, etc. But this result was due to suggestion simply. The Professor then told the subject that he had before him an audienee of depraved drunkards, and suggested that he make them a temperance speech. This he did *ex consuetudine*, and gracefully finished with a poem from Thomas Hood. He was then told that he had a chill, whereupon his face became cold and pallid, and shivering all over, he fastened his coat closely about him. Total abolition and then exaggeration of the tendom reflexes were alternately produced. The subject was told that in forty-five seconds he would awake. We all looked at our watches, and just at the time appointed he did awake.—J. M. H.

TREATMENT OF ABSCESS.—J. H. Coulter, M.D., in an article on Diagnosis and Treatment of Abscess published in the Peoria Medical Monthly, June, 1888, thus discusses treatment:

Scores, almost, of plans have been suggested and tried, but we may say all with varying success, dependent, it would seem, more upon the operator than anything else. Injections into the cavity of carbolic solutions have had the most admirers and in many cases excellent results, but with cold abscess when there is any fungoid growth the futility of the plan is evident. Injections of alcohol have been popular with French and German operators. Free incision and thorough cleansing with antiseptics has likewise been highly recommended, especially in hepatic, renal, splenic or pleuritic. This last method is German in its origin, and so far as I can learn remains so.

We are not warranted in awaiting developments in chronic abscess when there is evident the least effect on the general health. If it be of small proportions and nothing more than a scrofulous gummata, then a short delay may not be serious, but aspiration at once is best, for reabsorption is so infrequent that we cannot expect much from it. If counter-irritants be depended on to reduce the inflammation, it will usually be but a waste of time and effort. Several years ago aspiration was held in high

esteem, but it was replaced by incision and drainage. Just now, however, it has again sprung into favor, and I venture the opinion that it will remain so as long as things medical do usually. In those sacs which are opened and the sac dissected out, the cavity may be well dusted with iodoform and antiseptic lint or jute dressings applied, and the cure is practically certain, though slow, and also has the disadvantage of leaving a large scar. Nor can this plan always be safely followed, even with the most careful operator, aside from its inherent difficulties, when composed of several sacs. All these difficulties, however, seem to me to be overcome in a measure at least in every case, by the plan of Dr. Moorhof, of Vienna. It has been adopted by the French, who claim for it most excellent results. Lately several American surgeons have claimed for it unexcelled results. The plan is as follows: With an aspirator or trocar evacuate the cavity of pus as thoroughly as possible. If there exist sinuses or fistulous openings into other sacs, they can be reached as well with the needle as with the knife under careful manipulation. After having evacuated the cavity, thoroughly wash it out with a carbolic or corrosive chloride solution, probably the latter, until the water becomes clear. Then inject a solution combined with alcohol. The ether, however, should hold in solution iodoform in the proportion of thirty grains to the ounce. It may be used after the following prescription:

℞ Ether fort., 3 ounces.
Iodoformi., 2 drachms.
Alcohol, 1 ounce.

Prof. Tarrillion in speaking of the method says: "The quantity of liquid introduced into the largest sacs should not exceed four ounces," fearing too great an absorption of the iodoform. The liquid after a few moments is allowed to flow out, yet a certain amount will remain in the cavity, by which the entire lining membrane becomes coated. Under this treatment I have found that there was quite a painful attack, accompanied by some fever and headache; further than this nothing untoward was observed. In a few days, if one injection has proven sufficient, we will be able to discover evidence of resorption and the cavity to grow less. Dr. Terrillion advocates a repetition of the operation in six or eight weeks. I have repeated it only once as yet, but in that case I waited between three and four, the abscess being small and superficial, yet particularly obstinate because consisting of two sacs, one of which had evidently not received the benefit of the medication.

The time required to heal any abscess depends on: 1. The constitutional condition of the patient. 2. The extent of the sac. 3. Whether visceral or muscular. 4. And in many cases the method of treatment employed. In opening acute abscess the treatment will frequently effect but little for a few days, then a day or two of thicker, darker and more abundant secretion. But soon it begins to diminish in in both quantity and density, and the color becomes lighter as the quantity decreases. In my experience the color never, or seldom, assumes a lymph-like appearance. Some quasi authorities say that this condition only is a positive sign of healthy granulations in the sac. But I am inclined to think that while when present it is a favorable symptom, yet I do not consider it even usually present nor necessarily so to a favorable result. I have seen abscesses heal up and for the last few days only a drop of thick pus could be pressed out, showing that the sides of the sac have become agglutinated and are already adherent.

I have had repeated failures with carbolic injections, or very tardy healing. I have failed in three out of five times in the use of alcohol injections; incision is not always practical, nor can we always persuade the patient to submit to such an operation. Hence I am free to admit a partiality to the iodoform-ether process so long as its results are as satisfactory as they have been in the nine times I have used it.

A Local Treatment for Vaginismus and Vaginitis.—As it is my purpose to give only a local medical treatment for the diseases I have mentioned, I do not think it is necessary to go into the pathology of them or to mention all the causes that may produce them.

Vaginismus, as you all know, consists of a hyperæsthesia of the nerves supplying the mucous membrane and muscles of the vagina, and its orifice, which upon being irritated produces a spasmodic contraction of the sphincter and other vaginal muscles. This condition may be due to functional or local causes, more often the latter.

Vaginitis is an inflammation of the lining membrane of the vagina, and it may be of a specific or a non-specific character. This disease is often connected with vaginismus.

In the treatment of these troubles the first step is to remove the cause if this be possible.

In vaginismus you are aware that it is not easy to introduce a speculum, or even the finger into the vagina, without considerable pain to the patient.

My method of proceeding in these cases is to place the patient on her back, the pelvis somewhat elevated and the knees flexed. I either introduce a bivalvular or a small cylindrical speculum, I prefer the former as on account of its flatness it is easier introduced. Before introducing it, however, I lubricate it with vaseline, and then take a camel's hair brush and apply a four-per-cent. solution of cocaine both to the speculum and to the orifice. I then introduce the speculum into the vagina and very gently open the blades. By this means I give the patient very little pain. After placing a small roll of cotton beneath the speculum across the perineum, I pour into the vagina through the speculum, a solution composed of sulphate of zinc one or two grains, chloral hydrate five grains, water and glycerin of each four drachms. I wait several minutes and then withdraw the speculum slowly but not completely out of the vagina.

As I withdraw the speculum, the walls of the vagina come together and the solution touches every portion of the mucous membrane. I now push the speculum back again, and introduce a small cotton tampon with a string tied to it, pushing it back with a long dressing forceps, at the same time withdrawing the speculum.

The tampon will absorb that part of the solution which remains in the vagina and that which escapes will be absorbed by the cotton

on the perineum. I now place a piece of cotton between the labia, apply a bandage and the operation is completed.

I let my patient remove the cotton and withdraw the tampon in from four to six hours afterward.

I repeat this treatment three or four times a week. After the first treatment I have no need for the cocaine, as the finger or speculum can be introduced without giving much pain.

In vaginitis I proceed in the same way except I do not use the cocaine solution.

In vaginitis the chloral acts as an anæsthetic to the mucous membrane and vaginal muscles.

Between visits I have my patient to use vaginal douches of hot water with a little borax added to it.

By this treatment I have secured excellent results and my patients and their husbands, (if they had any) appreciated it very much in vaginismus.—N. GUHMAN, M. D., in *Weekly Med. Review.*

THE CAUSES OF PUERPERAL INFECTIOUS DISEASES.—After the doctrine of the infectious nature of puerperal fever had been generally accepted, efforts were, of course, made to discover the ultimate cause. Especially did the youthful science of bacteriology give great impetus to such investigations. Though the results were fruitful, in so far as finding germs were concerned, yet they seemed to do little more than confirm what clinical experience had taught, namely, the disease was not always due to the same cause. And just as erysipelas, sepsis, diphtheria and some other usually surgical diseases were looked on as the foci of infection, so, in later researches, the streptococcus pyogenes or that of erysipelas or diphtheria was found in the lesions of those who succumbed to childbed fever.

But, while the diseases named were and are clearly distinguishable, their minute causes are by no means so. Micro-organisms of the genus streptococcus are found as causes in erysipelas, phlegmon and some septic diseases, and as an accidental occurrence in diphtheria, in five conditions, which have many striking resemblances to each other. In appearance and mode of growth, they vary so little that the points of difference are believed by many to be caused by variations in the nutriment. Inoculations show some, though slight, difference of action. The thought was, therefore, very near to consider them as identical and assume that the resulting form of disease owed its type to some peculiarity, variable or constant, of the individual. Or, it was argued, that the species underwent "variations," a view advocated with enthusiasm by bacteriologists with evolution theories fresh in their minds.

Vidal has reported to the Academie de Médecine de Paris the results of his studies of the "forme septicémique pure" in puerperal fever, or typhoid type without suppuration (Gaz. hebdom., No. 22, 1888). In all of his cases he found the streptococcus pyogenes, and from this and the result of his culture and inoculation experiments, he comes to the conclusion that it is impossible, in the present state of our knowledge, to distinguish between the various forms of streptococci, and that one and the same form can set up any of the various forms of puerperal infection. In all of these conclusions he is confirmed by Doyen and by Arloing (L'Union méd., No. 74, 1888.

This is strong evidence, though it will require a much larger consensus of public opinion to settle definitely the questions as to the various kinds of streptococci, as well as the affections caused by them.

It is highly probable that many cases of puerperal fever, especially of the septicæmic type, are cases of mixed infection by putrefactive bacteria, and that to these are due the symptoms of intoxication by ptomaines, which distinguish some cases.

Practically, the unity or variety of the coccus is of no importance. Anti-bacterial remedies are no more potent against one form than another, and safety is only assured when all possible sources of infection are kept far away from the favorable soil offered by the *post-partum* genitals.—*Phila. Med. News.*

AN APPLIANCE TO PREVENT MASTURBATION.—One patient, a bright youth of seventeen, turned up this year at our Hospital Cottages, who kept himself from masturbation when not asleep, but often awoke to find himself accomplishing the act, much to his chagrin. He was an epileptic, presumably from this excess, which had become fastened upon him four years before. There was no other cause known. He was having thirty or forty seizures some days, the most of them being an ecstasis of from ten to forty seconds' duration. He clinched his hands tightly, sometimes raising them above his head, and again pressing them tightly into the bed on which he sat, assumed a broadly smiling expression, but with mouth closed and eyes open, trembling a little just as a person often does as he finishes a gape raised his feet from the floor a few inches both together, and suddenly resumed consciousness and his natural position.

Under treatment, dietetic and medicinal, he improved; and after his masturbating was entirely ended, the spasms did not recur, and have been absent for nearly three months.

The mechanical appliance used to assist his resolution was a plaster bandage applied as follows: A sheath of oil-silk was first made, to cover the penis and project an inch beyond, the limp organ hanging down straight between the thighs; then a layer of cotton wadding covered in the scrotum and buttocks, leaving a triangular opening, three inches on each side, for defecation. The plaster bandage then covered all, and went down around the penis and up about the waist, making, when hard, a complete casing, so that the boy's genitals might have been in the next county for all the sensation his hands could communicate.

He managed very well at stool, suffered no chafing from the edges between the thighs, walked freely enough (though he could not take full-length steps), and urinated while standing and holding the vessel under the projecting oil-silk. He surely did not masturbate.

He soon acquired a confidence that was comforting, and his self-respect began to improve. After a few weeks he felt tolerably safe; and, as the bandage had become soiled in places, and was rather disagreeable in consequence, it was removed, and has not yet been reapplied.

There seems to be no reason why such cases

may not wear a similar appliance any length of time and with perfect protection. The writer trusts that this method, if not already in use or condemned as useless, may prove of service to others.—Everett Flood, M. D., in the *Boston Medical and Surgical Journal.*

DIABETES MELLITUS.—The British Medical Journal contains the following resume of Professor Seegen's paper on, "Diabetes Mellitus in Regard to Recently Acquired Knowledge Regarding Sugar-formation in Animals," which appeared in the Zeitschrift für Klin. Medicin., Bd. xii. The chief results of his investigations are formulated in the following theses: 1. The formation of sugar is a normal process, going on in the liver uninterruptedly. 2. The daily amount of sugar formed in the liver is very considerable. 3. The sugar is continually converted in the body; but where and in what way this occurs has not hitherto been explained. 4. Sugar or carbo-hydrates taken as nourishment, do not participate in the formation of sugar within the liver 5. Albumen and fat are the materials from which the liver forms sugar. 6. The formation of glycogen in contrast to liver-sugar, is intimately related to the kind of nourishment taken, and is greatest when cane-sugar is taken. How do these facts agree with those derived from clinical observation of diabetes mellitus? The latter occurs in two forms; in the first of these (the light form), the patients are usually well-nourished, belong to the middle period of life, and voracity, thirst, and polyuria are only seldom excessive; in the second, or severe, form, the patients are usually young, lose flesh rapidly, and have great voracity and thirst, with an excessive amount of urine. The main distinction between these two forms lies in this, that patients of the first class only excrete sugar when they take sugar or carbo-hydrates in their food; the symptoms of diabetes cease when these are discontinued. In the second class of patients, the sugar excretion is scarcely influenced by the avoidance of carbo-hydrates in the food. Seegen is of the opinion that these two forms represent two distinct pathological processes. In the first, the excreted sugar is derived undoubtedly from the sugar ingested, and the diabetes must be regarded as the result of incapacity of the liver cells to dispose of the carbo-hydrates in the normal manner. In the second form it must be assumed that the normally formed liver-sugar is excreted. The whole body, or more or less of its elements, has not the capacity to "convert" the sugar conveyed in the blood; hence the graver prognosis in this form than in the other. The ultimate cause of diabetes is still unknown, but the author is of the opinion that nervous derangements very frequently underlie this disease.

PRACTICAL HINTS ABOUT CHILDREN.—Dr. Jacobi gives in the Archives of Pediatrics the following suggestive hints about the management of children: "Always teach a nurse that a child cannot swallow as long as the spoon is between the teeth; that it is advisable to depress the tongue a brief moment, and withdraw the spoon at once, and that now and then a momentary compression of the nose is a good adjuvant. Syrup will turn sour in warm weather, glycerin and saccharine keep. The taste of quinine is corrected by coffee, chocolate and 'elixir simplex.' Powders must be thoroughly moistened; unless they be so, the powder adhering to the fauces is apt to produce vomiting. Inunctions require a clean surface, and are best made where the epidermis is thin and the net of the lymph-ducts very extensive on the inner aspect of the forearm and the thigh. Babies after taking opiates for some time, demand larger, and sometimes quite large doses to yield a sufficient effect. Febrifuges and cardiac tonics, such as quinia, antipyrine, digitalis, strophanthus, sparteine, convallaria, etc., are tolerated and demanded by infants and children in larger doses than the ages of the patients would seem to justify. Mercurials affect the gums very much less in young than in advanced age. The rectum of the young is straight, the sacrum but little concave, the sphincter ani feeble, and self-control gets developed but gradually; for these reasons a rectal injection is either allowed to flow out or is vehemently expelled. Therefore one which is expected to be retained must not irritate. The blandest and mildest is a solution of six or seven parts of chloride of sodium in a thousand parts of water, which serves as a good vehicle for medicine unless incompatible with the latter. The injection must be made while the child is lying on its side (preferably the left side) not on the belly over the lap of the nurse, for in this position the space inside the narrow infantile pelvis is reduced almost to nothing. In many cases of intense intestinal catarrh, large and hot (104° to 108° F.) enemata will relieve the irritability of the bowels and contribute to recovery. They must be repeated several times daily. When there are many stools, and these complicated with tenesmus, an injection, tepid or hot, must or may be made after every defæcation, and will speedily relieve the tenesmus.

THE THERAPEUTICS OF CIRCUMCISION.—An elongated and tight prepuce is answerable, as is well known, for many disadvantageous conditions, which are happily remediable by adopting the simple plan of removing the redundant adjunct to an otherwise perfect organ. This mutilation, if such it may be called, is, therefore, oftentimes essential for the well being of the child or the adult; and apart also from the immediate cause which may happen to have led to its adoption, it is every sense of the word always a hygienic procedure. In a recent number of the Revue Médicale de la Suisse Romande, Reverdin has published a useful article which bears upon this question. He quotes an American authority, Adams, who recommends circumcision in the case of children who suffer from nocturnal incontinence of urine, in whom this symptom can be attributed to no other cause. The same authority affirms that symptoms of coxalgia are sometimes produced by phimosis, relief from which is readily to be obtained by performing circumcision. Reverdin relates a case which supports this opinion. A child, æt. 9, suffered for several weeks from signs of hip-joint disease. The case was diagnosed as one of this description,

and the patient was confined to bed for five months and extension applied. At the end of this period his condition was in no way improved. At this time, however, it was noticed that the prepuce was elongated and tight, for which circumcision was performed, and all the symptoms vanished at the end of three days. A year subsequently to the operation the patient was quite well, and had not suffered from any recurrence. Reverdin observes that he has noticed circumcision to produce a notable amelioration in the physical state of a young hypochondriacal man, who had even attempted suicide; cases of epilepsy seem also to be much relieved in certain instances by the operation for phimosis, and the same may be said of chorea and other nerve affections. The close connection, again, which subsists between hernia and phimosis in infants, is generally admitted, and is frequently to be seen in the outpatients of hospitals.—*Medical Press*, June 27, 1888.

Iodoform in Hæmoptysis.—We wish to call the attention of our readers to the claim made by two French physicians, Chauvin and Jorisenne, that iodoform is an efficient and prompt remedy for hemorrhage from the lungs. Its action is not confined to a temporary stanching of the bleeding, but usually checks the tendency to the recurrence of it which is so common, and when this does take place it is not nearly so grave as the first hemorrhage. One of the advantages of the use of iodoform in hæmoptysis lies in the fact that it is active in very small doses. The average dose used by MM. Chauvin and Jorisenne was about three-quarters of a grain. It was given in pill form, made up with extract of gentian or of licorice, and from three to five doses were given daily. It is said that the patients treated in this way were delighted with the method, and MM. Chauvin and Jorisenne speak of it in the most enthusiastic way.

Anyone who has had much experience in the treatment of hæmoptysis knows that it often ceases spontaneously, and that it is not always safe to conclude, when remedies have been used, that art has accomplished what nature so often does without assistance. But it is not to be supposed that the physicians who praise iodoform so highly are ignorant of this fact, or have failed to take it into consideration. So, it seems quite worth while that the use of iodoform should be given a fair trial, especially as this drug is often of great value in the treatment of the condition in which hæmoptysis most commonly occurs.—*Medical and Surgical Reporter.*

Balsam of Tolu as an Adjuvant to Creasote.—A correspondent in the British Medical Journal of June 23d, writes: "In the Union Médicale of April 22d, Dr. Lasniée pointed out the advantage of combining beech creasote with tolu balsam and Norway pitch. Creasote, which is so useful in pulmonary and laryngeal affections, is not always easily tolerated, sometimes causing nausea and vomiting. It was, therefore, necessary to find some means of neutralizing these inconveniences. This has been found in tolu balsam, the antispasmodic and anticatarrhal properties of which are well known, and which, together with Norway pitch, forms an excellent and reliable remedy. After numerous experiments the following formula has been adopted by MM. Troutte and Peret, pharmaceutical chemists, in their capsules, called by them 'gouttes livoniennes:'

℞ Pure beech creasote, 5 centigrammes.
Purified Norway pitch, 7½ centigrammes.
Tolu balsam, 7½ centigrammes.
Sig.—To make one capsule.

In cases of little gravity, and when used as a prophylactic, two capsules morning and evening are sufficient. In more serious cases, one should begin with four capsules morning and evening, increasing the dose, if necessary, up to twelve capsules a day. When the disorder is relieved, the use of the capsules should not be suddenly abandoned, and it is also good to take some at the commencement of winter, and at any change of season accompanied by damp weather.—*Medical Register*, July 14, 1888.

Another Case of Apparent Cure of Cancer of the Stomach by Cundurango.—Our readers will remember the report of the remarkable results obtained by L. Riess in the Berlin Municipal Hospital with cundurango in gastric cancer.* In the New Yorker Medizinische Presse for April, Dr. Franz Foerster reports four cases presenting all the symptoms of cancer of the stomach which were treated with this drug. In two cases no favorable effect was noticed; in the third he believes that life was prolonged, while in the fourth case a positive and permanent cure resulted. The diagnosis must of course remain somewhat in doubt; but the symptoms and physical signs present were strongly indicative of the disease mentioned.

The treatment of gastric cancer is in general so entirely hopeless that any addition to our therapeutic resources, which promises even partial relief from the distressing symptoms, is deserving of a hearty welcome.

The testimony of all recent writers upon the subject is to the effect that cundurango is well borne in these cases; that it arrests vomiting, reduces the pain and stimulates digestion. With the added hope of producing a cure, an additional reason is presented to give the remedy a trial. Dr. Foerster used a fluid extract of the drug, given in half-drachm doses, with syrup, three times a day.—*Med. Times.*

Paraldehyde in Obstinate Vomiting.—Having been in the habit of prescribing, in my practice, paraldehyde in the treatment of insomnia in alcoholism, the patient usually being affected with gastritis, accompanied with obstinate vomiting, I have noticed that the first dose was sometimes rejected from the stomach, but the second, given usually in one or two hours, was almost invariably retained, notwithstanding the fact that for hours previous to treatment, in the majority of cases, not the lightest form of food or liquid would remain.

It occurred to me that the same remedy might be serviceable in checking vomiting in

* Phila. Medical Record, May 27, 1887.

other cases. I have used it in ovarian irritability with sympathetic stomach disorder, in vomiting of pregnancy, and in the distressing nausea of migraine, with the most gratifying results. The formula employed is as follows:

℞ Paraldehyde, ♏xl.
Elix. simp., ʒ i.

M. S. One teaspoonful in a little water, repeated in half an hour, if required.

This small dose in its effects is not hypnotic, acts as a sedative not only upon the mucous membrane of the stomach, but also has a tranquilizing effect upon the whole system. But few doses are usually required. The only objection to its use is its disagreeable odor.—U. B. La Moure, M.D., in *Albany Med. Annals*, June, 1888.

A Cannabis Indica Mixture for Phthisis.—Dr. Bradshaw, in his article on "Some Points in Treatment at the Memorial Hospital, Orange, N. J." (The Medical News, June 30, 1888), refers to a cannabis indica mixture I introduced into hospital use, and gives its formula. That was the one used several months ago. The mixture, as thus prepared, is very pungent and to some persons distasteful.

My pharmacists, have, at my request, altered the original formula so as to make it read as follows:

Tr. cannabis indicæ, f ʒ viij.
Ext. verbas. thap. fl.,
Ext. verben. hastat. fl. (known as blue vervaine), ää f ʒ v f ʒ ij.
Syr. simp., Oj.
Elixir aurant.,
Tr. aromat., ää f ʒ xij.
Mel. despumat., f ʒ xxxij.
Spts. chloroformi, f ʒ iv.
Sig.—ʒ j to ʒ ss p. r. n.

This is an elegant and palatable mixture, and affords great relief to many who use it. In some instances it increases the appetite, seldom impairs it; does not nauseate or constipate; hence, may be taken for long periods without harm.—J. W. Stickler, M. D., in *Med. News*, July 14.

Treatment of White Swelling by Electricity.—In a very interesting work by Dr. Léon Dannion on the Treatment of White Swelling by Electricity, the author summarizes as follows his conclusions on this mode of treatment which he has adopted for several years: 1. The results obtained until now by electricity applied to white tumors in full evolution, with or without fistulous tracts, show: (a) that it can arrest its progress; (b) that it can determine a regression of the fungous development; (c) that the part comprised might recuperate at least partially and sometimes to a great extent its integrity and its functions. 2. Although one can always gainsay the sense of the ulterior evolution of an arthropathy, the power of electricity to check a white swelling at its origin seems undeniable. In any case after the excellent effects produced by it in arthritis, whatever be its origin, it should be employed as a preventive means to all arthropathies in general, or at least to those of a suspicious nature. 3. The therapeutic power of electricity is due to its special antiphlogistic and enthropic property, that it acquires from the intimate relation which exists between the human electrogeny and the nervous function.—*Jnl. of Amer. Med. Associ.*

Semolina in Diabetes.—Mr. W. Stanley Armitage writes, in the Lancet of April 28, 1888: Some time ago I had the opportunity of watching a case of persistent glycosuria very closely, and found that at a time when the ingestion of a very small amount of toast, bread, or other farinaceous food was sufficient to produce Fehling's test afterwards, in the urine a large quantity of semolina pudding could be consumed without any such result. I was induced to try semolina after hearing of the method of its manufacture from an Edinburgh gentleman. As the quality of this food seems to me likely to vary, I ought to state that what was used in this case was obtained of an Edinburgh house, and was stated to be of the best. This I mention because, if carelessly prepared, no doubt much of the farinaceous element might be retained, though I am not aware that this is the case. Not having heard of semolina as a food in diabetes, I should much like to hear of anyone who may have tried it, and would also request other medical men to see if it can be given in other and more pronounced cases of diabetes with a like good result. If such were the case, as it could be cooked in various forms, or baked as bread, it would add considerably to a class of food which is at present only far too limited.

A Simple and Efficient Water-Filter.—For a long time I have used in my butler's pantry a simple contrivance for filtering water used on the table, which has been so serviceable and, at the same time, so inexpensive that I venture to recommend it. I took an ordinary glass pharmaceutical percolator and packed the outlet with absorbent cotton so tightly that the water could only flow in drops. By means of a piece of copper wire for a bale, it was suspended from a hook on the lower side of one of the pantry shelves, over the shelf of the sink. As often as necessary, water is poured into the percolator, and the water-pitcher is placed under the outlet. Whenever the cotton shows much discoloration (a thing which is easily observed, owing to the percolator being of glass) the maid replaces it with fresh absorbent cotton. It is in all respects the most practical and cheapest filter I know of, and has no machinery to get out of order, no patent right to carry, and the advantage over most filters that the filtering medium is always under observation, so that there is little risk of contamination of the water by accumulations of filth.—F. A. Castle, M. D., in *N. Y. Med. Jnl.*, July 7, 1888.

Agaricine in the Sweating of Phthisis.—Piermy, has experimented recently in Professor Hribrams' clinic with this new alkaloid, prepared from the alcoholic extract of the white agaric; he gives it in doses from 1-70 to 1-60 of a grain without any effect sometimes, but generally it diminishes a profuse sweating

when he gives it in 3-70 of a grain or more; he had the following results:

1. Agaricine nearly always decreases the sweating in consumptives.
2. It has no modifying effect on the respiration.
3. In cases of profuse sweating, when suppressed by this alkaloid, the pulmonary and skin functions were not modified.
4. The result seems to depend on lessening the absorption of water as the thirst and urine were diminished under its use.
5. A few pills of one-sixtieth of a grain each of agaricine would arrest a profuse sweating in four or five hours.
6. The use of agaricine gives no inconvenience whatever afterwards.
7. The feebleness of the consumptive is diminished, but the other symptoms are not modified.—*N. Y. Med. Times.*

TREATMENT OF CHRONIC DIARRHŒA.—Debove, in a recent communication to the Medical Society of the Hospitals, claims great success in the treatment of chronic diarrhœa, especially the tuberculous form, generally so little amenable to therapeutic agents, by silicate of magnesia. This remedy he administers in massive doses, half an ounce to an ounce and a half a day suspended in a quart of milk. As a result of this treatment the diarrhœa disappears completely, and gives place to an obstinate constipation.

The silicate of magnesia is known under the name of *talc* or *steatite*. The powder of talc is insoluble, inert, and has not heretofore been supposed to have any medicinal properties whatever. According to Debove it has sedative properties on the digestive tube similar to those of bismuth, than which it is safer—it promotes the healing of intestinal ulcerations, but seems only to be efficacious by its presence in massive quantities. This substance, Debove says, is readily and rapidly eliminated from the intestines.—*Boston Medical and Surgical Journal.*

PHYSIOLOGICAL AND THERAPEUTIC PROPERTIES OF OLEANDER.—Dr. Poloux, at the close of a thesis on this subject, draws the following conclusions:

1. Oleander (nerium oleander) is a very active poison, the toxic properties of which are due to several substances somewhat similar to strophanthine and digitaline, and probably belonging to the group of glucosides.

Oleander has a manifest action on the frog's heart, arresting it in systole, as well as on the heart of the rabbit.

3. In cases of asystolism due to renal, or non-compensated cardiac lesion, oleander gives tone to the heart, and increases diuresis. It seems to be indicated in the same cases as digitalis.
4. Further researches are necessary to determine the cases in which oleander is really useful and in which it is not contraindicated.
5. It does not cause cumulative symptoms, and may be given for an indefinite time without causing accidents.—*Nouveaux Remèdes.*

CHLOR-ANODYNE. — This preparation has justly acquired a high reputation as an anodyne. The formula as improved by Parke, Davis & Co., we have found most reliable. We have used it in doses of from 1 to 30 drops with very satisfactory results in cases when, on account of idiosyncracies or other causes, morphine could not be taken. In cases of nausea and vomiting it acts well, allaying the nausea and quieting the patient. It is well adapted to children, to whom we frequently give it in broken doses with admirable results. In dysentery and mucous diarrhœa of children, after the action of a small dose of chalk and mercury or calomel, we have found that 15 drops added to a half glass of water, of which a teaspoonful may be given, makes an acceptable and efficient preparation, even where nausea exists. It should be given every hour until the evacuations are somewhat restrained, and then a dose after each action until relieved.—*So. Med. Record*, July, 1888.

THE ABUSE OF ANTIPYRINE.—That antipyrine is being very generally used without the advice of a physician, appears from the evidence which has been obtained from both physicians and druggists. We are informed that it is not an uncommon thing for those who suffer from headaches to purchase the drug and take it in twenty-grain doses, entirely unconscious that they run any risk in so doing. Evidence is accumulating that antipyrine so used is fraught with danger, and there are already enough cases recorded of the production of alarming symptoms by small doses to put even physicians on their guard against the indiscriminate use of the drug.—*Brooklyn Medical Journal.*

PEPSINUM PURUM IN LAMELLIS.—According to the editor of the Texas Health Journal, July, 1888, the best pepsin in the market is the new preparation prepared by Parke, Davis & Co., "Pepsinum Purum in Lamellis." The dose is from one-half to two grains, but thinking it harmless as many other preparations of pepsin. The editor states that he took ten grains after a hearty meal. The effect was most marked; hot, unpleasant feeling in the stomach and great thirst for several hours. Subsequent trials of one-grain doses proved the superior efficacy of this over all other preparations of pepsin.

PARTHENICIN—An alkaloid, to which the name "parthenicin" has been given, has been isolated by DR. ULRICI, of Cuba, from the leaves and flowers of Parthenium hysterophorus, commonly called Artemisilla or Escoba amarga. It is a crystalline substance, with an intensely bitter taste. It poisons animals, the temperature being previously greatly reduced, and it appears to have antipyretic, anti-intermittent, and analgesic effects on the human subject. It has been given in doses of fifteen grains once a day.—*Brit. Med. Jnl.*, June 16, 1888.

The Medical Age.

Vol. VI. DETROIT, AUGUST 10, 1888. No. 15.

Original Articles.

THE SUMMER DIARRHŒA OF CHILDREN.*

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It is recorded that nearly two thousand years ago there was fulfilled a prediction of the Prophet, and "in Rama there was heard a voice of lamentation and weeping and great mourning;" and even at this distant day the heart sickens in contemplation of the inhuman butchery which was the occasion of such mourning and desolation in the Judæan homes. Our indignation rises at the inhumanity of a Herod, but so familiar have we become with the ravages of a ten-fold greater destroyer that we regard with a sort of stolid indifference the wail of tens of thousands of Rachels in our own day, who refuse to be comforted for those who are not.

At this season of the year, particularly, the white insignia of death flutters from thousands of door-knobs, while there is scarcely an assemblage which is not darkened by the sable habiliments of mourning. So familiar, however, have men become with this awful iteration that they scarcely realize the presence of the destroyer until, perchance, he enters their own homes to lay his icy grip on one of their own innocents. The "lamentation and weeping and great mourning," are, in a measure, assuaged by the comforting reflection that these things are but the dispensations of an allwise Providence, and after a brief season they are practically forgotten. What sacrilege, to charge the great God with the sequences of ignorance and incapacity! Some of these deaths of infants, it is true, are owing to causes which may be properly classed as unavoidable, as certain forms of hereditary disease, the malformation of internal organs, and, perhaps, also, the peculiar susceptibility of the infant to morbific influences. But, in the vast majority of instances, the frightful destruction of life between birth and the third year, is directly traceable to causes which are capable of being controlled, to wit, improper food, impure air, imperfect hygiene and lack of suitable clothing.

Owing to an imperfect system of preparing mortality reports,* we are unable to ascertain to a certainty the death-rate of infants in this country, and are obliged to depend for our conception of the aggregate loss on the statistics of those countries where a more systematic registration obtains. From these we discover that one child in five dies before reaching the age of one year, and one in three before the age of five is reached. In New York city the mortality is very great, fully half of the deaths occurring there being among children under five years of age. In France it is estimated that of a million children born, 250,000 die before reaching the age of one year. In England and Germany sixteen out of every hundred die during the first year. There is nothing in our habits of life, climate or surroundings to warrant us in assuming that the death-rate of infants here is lower than that in the transatlantic countries named. On the contrary, the length and severity of our heated term would, presumably, make for us a worse showing.

This appalling mortality, sufficient to satisfy the most ardent Malthusian, may justly excite our alarm, not only as parents and physicians, but also as citizens of a commonwealth presenting the peculiarities of ours. This mortality strikes at the very root of our national integrity ("the hope of a nation is in its children"), in that it deprives us of hundreds of thousands of lives annually, which, if permitted to reach maturity, would furnish a citizenship which a foreign immigration can never adequately supply. The causes contributing to this alarming outlet to human life are numerous, but the time and space I have allowed myself forbid the mention of more than the most prominent one, and the one, too, which could be most easily avoided, viz., "summer complaint," as the term is popularly applied and understood. I use the term under protest, however, as it is a misnomer. It is employed to designate several diseases presenting several peculiarities in common, but which are so radically different as to

* [This paper, slightly altered to meet the advances of the intervening period, was read before the Wayne County Medical Society some years ago, and is now reproduced by special request.—J. J. M.]

* To the credit of Michigan, be it said, the vital statistics of this State are prepared with considerable care. They show the mortality among infants under one year to be a fraction less than 23 per cent. of the total deaths, while that of children under five years of age is 39½ per cent. of the whole. These figures are somewhat higher than those taken from European statistics.

justify the rejection of a term which, by imputation at least, places them in the same category. There is something in a name, poetry to the contrary notwithstanding, and the name of a disease should, so far as may be, betoken some pathological condition. "Summer complaint" is suggestive only in so far as it implies that the affections it embraces—diarrhœa, vomiting, dysentery, and cholera infantum—occur with great frequency at a particular season. These affections are, however, by no means peculiar to this season; but it is with them as occurring during our heated term that we are now concerned, and I shall endeavor to answer the question why they occur with greatest frequency and fatality at this particular season, rendering it, so delightful in most other respects, the dread of mothers and constituting it the most trying ordeal through which the child is called upon to pass. The infant that passes its "second summer" has had its chances of reaching maturity very much enhanced. Why?

Up to the time that the child has developed its deciduous or milk teeth, it passes what may, not inaptly, be termed a vegetative existence. It is just about entering its normal, animal state, when it is struck by the depressing heat of summer, and happy indeed is that parent who has up to this time reared her child in conformity with physiological law—in such manner as to best fit it to withstand the disturbing conditions into which it has been precipitated. Children that have been properly cared for up to this period will, in the vast majority of instances, pass the ordeal unscathed, while those in whose rearing nature's laws have been, either ignorantly or carelessly neglected, succumb. The heated term occurs at that period of the child's existence when its alimentary canal is undergoing a process of evolution. Salivary, mucous and intestinal glands which had previously either not existed at all, or had existed very imperfectly, are now being developed. The anatomist looks upon the child as the miniature man, but the physiologist regards it as a man incomplete as to some of its functions. These functions are now being developed, and, as a consequence, the system of organic life is in a state of great activity. The sympathetic nervous system which presides over these functions is in a state of extreme tension and very susceptible to disturbing causes. Of these, as occurring at this season, some are unavoidable, and chief among them is the summer heat, which, besides exerting its depressing influence on the system, has also a deleterious effect upon the diet which is commonly administered to children at this tender age and critical period, thus constituting a source of trouble too often overlooked.

The sudden changes which take place in our climate, and the difference in the temperature of the night from that of the day, act as strongly predisposing if not actually exciting causes.

It is a fact which has not escaped the attention of observers, that a persistent temperature of eighty degrees, Fahr., and upwards, is productive of derangement of digestion among all children, even among those in whose rearing the utmost vigilance has been displayed. If children that have been properly raised are thus seriously affected by conditions incident to the heated term, what are we to expect of those that have been cared for on principles in open defiance of all dietetic and hygienic law? The result is precisely what we might expect. The hand-fed child, a puny, ill-nourished thing at best, besides being subjected to like deteriorating influence with that reared at the breast—enough in themselves to blot out the little life in it—is forced in addition to partake of unnatural, ill-prepared and vitiated food administered by kindly but misguided hands. The last straw has been added; the camel's back is broken and the City of the Dead receives a new inhabitant.

In order to comprehend the cruelties in the matter of diet to which hand-fed children—and in the majority of instances, also, those that are supposed to be reared at the breast—are forced, *nolens volens*, to submit, it is necessary to start from the moment the child has entered upon an independent existence. Scarcely has the little bit of humanity had its maiden toilet prepared when nurse stands ready with her bowl of sugar-and-water, pap, or catnip or saffron tea. "It clears the throat of phlegm, you know, doctor," and the physician who has the temerity to assert, be it never so gently, that the little stranger will get along much better, for the first twenty-four hours after its arrival absolutely upon nothing, will be met with that withering look of combined incredulity and pity from the autocrat of the lying-in room, which has blighted many a promising young practitioner. But, gentlemen, the well-being of the child is at stake, and we not only compromise our professional standing, but are also morally culpable just in so far as we do not resist the encroachments of the ignorant women who form so large a proportion of those who assume the responsible position of nurse. The young physician can ill offer to brook the opposition of the old nurse, but he can much less afford to curry her favor by conniving at her pernicious practices. The ingestion of the vile stuffs with which the infant is unnecessarily dosed is the first step towards the formation of that bugbear of old women (of both sexes) the "red goom," an affection brought on by the very means adopted to guard against it. And what is this "red goom"? It is a papular eruption on the gums and in the mouth which bears the same relation to the saffron tea, etc.,

which the child has been given, that nettle rash, which will affect some of you, bears to the spoiled lobster or the old mackerel, if you eat it. Unless the physician have a sufficient hold on the confidence of the family to enable him to nip the matter in the bud, this first display of ignorance of physiological law will prove but the beginning of a course of unnatural regimen, which will ultimately bring death to the child. Nature is inexorable in her laws which she never suffers to be violated with impunity. Until the child has cut its incisors, anterior molars and canines, all farinaceous diet which may be administered, must of necessity be irritating if not positively poisonous. Nature's laboratory up to this time does not permit the ferment necessary to the digestion of food other than that which she has intended for the infant, viz., milk. Particularly during the first few months of life any farinaceous, or other diet than milk affords no nourishment and satisfies only in virtue of its bulk, and besides being useless it is positively injurious from its liability to undergo fermentation before it can be got rid of *per vias naturales*.

Thousands of infants die annually in this country from starvation. A most appalling assertion to make in an enlightened age, but one, nevertheless, which is borne out by facts. The remark applies, of course, with greatest force to artificially-fed children. Many mothers whom the usages of a false society have rendered unable or unwilling to nurse their children, but in whom there is still left enough of the holy maternal instinct to prevent them from committing the sacred duty to a hireling, endeavor to rear their offspring "on the bottle."

The great principle at the foundation of all successful feeding, of either adult or infant, is that the supply of food be proportioned to the ability to digest. The extent to which this principle, axiomatic though it be, is disregarded is truly lamentable. The child after a brief season of hand-feeding, or gorging at the breast, begins to grow fretful, whines uneasily, twists its little body and jerks its little limbs. To pacify it, it is, if not dosed with paregoric or soothing syrup, either given the bottle or put to the breast. Pained by the indigestion which is just setting in, or irritated by the tooth which is perhaps pressing through the gum, the little sufferer greedily seizes anything that may be offered it to eat or drink, and for a time is quiet. For a time the device of filling the child's stomach every time it cries or whines, answers the intended purpose; but soon nature rebels. The child becomes more fretful, and the stomach rejects its unwelcome load. Soon intestinal troubles follow this gastric disturbance, but still nature's protest is unheeded, or misunderstood, and again food is given and rejected. The little infant is a helpless sufferer under all this cruelty. In the language which God has given it before he gives it speech, it pitifully prays for mercy; but this language is an unknown tongue to the anxious mother. Soon the appetite becomes capricious, the stomach and bowels grow irritable, the child becomes emaciated and grows pale, the eyes grow glassy and sink into the head, fever ensues, the pulse becomes quick, thready and irregular, the skin grows parched and is apparently attached to the bones, and the whole train of symptoms indicative of starvation follow each other in rapid succession until perhaps convulsions supervene, and death comes in to close the scene. The child has died of starvation with its stomach full. This is by no means a hypothetical case; it is frequently duplicated, and is painfully familiar to every practitioner of any considerable experience in the treatment of children.

"But," says some sage matron, "I have raised a large family of healthy children without adopting any of the precautions you would consider necessary." In reply we might point her to her sisters, who lace themselves to emulate the insect, and to men who have been shot through the head or have been run over by a railroad train, and yet live. These things prove merely that some men, some women and some children are extremely tough.

But while death from inanition is sufficiently common to excite alarm, the large percentage of the mortality among infants is directly due to the micro-organisms which are introduced into the alimentary canal, there to multiply and replenish, with the decomposing food. The infantile alimentary canal in its developmental stage is, as already stated, susceptible to disturbing agents which assail the developed intestines with comparatively little effect. The disturbing agents in the heated season, it is almost if not quite impossible to keep out of such infant food as is not drawn directly by the child itself from its mother's breast. The atmosphere in the summer season is charged with the micro-organisms of decomposition, and the lodgement of a single one of these in the suitable medium which is furnished by the usual foods employed in artificially feeding the infant, furnishes the nucleus of extensive colonies, which on being conveyed into the child's intestine, create a disturbance which the resources of the medical art have thus far but indifferently succeeded in allaying. The first effect of these bacilli is to convert the sugar in the milk into lactic acid. After the lactic acid has been formed it is turn attacked by another bacillus—bacillus subtilis—and converted into butyric acid, with the evolution of carbon dioxide and free hydrogen. Until recently the above was the nearest approach to our knowledge of the direct

disturbing factor in the diarrhœa and its attendant complications, in bottle-fed children. Dr. Vaughan, of Ann Arbor, has, however, advanced us a step in his discovery of a product of the decomposition referred to, in the substance to which he has attached the name of "tyrotoxicon." The tyrotoxicon (cheese-poison) is a crystalline nitrogenous substance, and is, probably, a ptomaine. Its formation is in connection with butyric acid fermentation. Isolated and introduced into a dog, it produces all the prominent symptoms of cholera infantum. If it is not the sole direct cause of this deadly infantile disease, it is very probably the most active factor.

Treatment.—The treatment of "summer complaint," so called, is necessarily both prophylactic and curative. The prophylactic treatment has already been indicated, and consists in either feeding the infant directly from the mammæ, or, this being impossible, in preventing decomposition in the artificial food given. Many "rules" for the management of infants have, from time to time, been promulgated, but in some instances they have been too complicated for practice. The essential "rules" are such as will suggest themselves to the ordinary well-balanced mind, even though it have not been prepared by a medical education:

Warmth, cleanliness and fresh air. Let the clothing be warm but not tight. Wash the child all over with warm water daily, wiping thoroughly and drying afterwards. Never let a napkin remain on a minute after it has been wet. Send the child out for a short time every day when the weather is fine, and while it is out air well its room by freely opening the windows.

Under the age of seven months give the child absolutely nothing but its mother's milk. When the mother can not or will not suckle her young, a wet-nurse should be employed, and it is only when one of these cannot be secured that "the bottle" should be resorted to. The mother's milk is, however, very susceptible to both physical and emotional disturbances on the part of the mother. Overwork, indigestible food, emotional agitation, mental worry, etc., should, therefore, never be allowed to disturb the nursing woman.

When circumstances leave no recourse but a resort to the bottle, the nature of the contents of the bottle is all-important. Deprived of the food which nature designed for it, the infant has a right to the nearest substitute, and this we discover in the milk of some other mammal. There are animals whose females secrete milk which comes very near in its chemical constitution, to the milk of woman. The human milk coagulates into flaky curds and is thus more readily attacked by the digestive ferments of the child's stomach than is such milk as coagulates into a hard, cheesy mass. The milk of the ass resembles the woman's most closely in this regard. In other respects the milk of the goat more nearly approaches that of woman. These animals are, however, not kept in sufficient numbers to supply the milk required in the artificial feeding of children. The milk of the cow is, therefore, the nearest practicable substitute for that of the woman. This is, however rich in casein, and coagulates into a very firm curd. By mixing it with barley water the firmness of the curd may be prevented, and by adding a sufficient quantity of sugar to sweeten, we have a very good substitute for the mother's milk. During the first month the cow's milk employed for food should be diluted with a quarter of its bulk of barley water. The diluent may be gradually decreased in quantity until at four or five months the cow's milk may, in most instances, be given in its purity. The bottle should draw easily and should be provided with a nipple only. The device which has the rubber-tube attachment is an abomination, the manufacture of which should be a misdemeanor. It is practically impossible to keep the tubing clean and free from particles of milk, which decomposing start the process of fermentation in the fresh contents of the bottle. The bottle and nipple should be kept in an alkalinized solution when not in service. The Condensed Milk in the market I have found to do very nicely when the milk from the cow is not above suspicion. In using any of the several brands be sure to not dilute it too much. The strength recommended on the labels is usually too weak. All milk should be prepared for the bottle immediately before using.

The child should be fed regularly and at short intervals—once in two hours for the first six weeks, after which once in three hours. During the night it should not be fed so often. It soon learns regular habits in this direction. It should never be given the breast or bottle for the mere purpose of keeping it quiet. When over seven months old some starchy food, as barley, rice or oatmeal, may be incorporated with the milk. No solid animal food should be given the child under two years of age. Even at two years milk should be the principal diet, and any meat given should be thoroughly pounded.

Stimulants of all kinds should be avoided, and although beer is, doubtless, valuable as a promoter of the milk secretion in the mother, it should be taken by her only as a matter of necessity. The soothing medicines, sleeping draughts, cordials, teething powders, etc., of which the name is legion, should be banished from the nursery, and even ordinary medicines should be given only under proper medical supervision.

The question of the most desirable food after milk has for any reason been found to disagree,

is all-important. A great variety of these substitutes are on the market and some of them are good, others are bad and not a few are indifferent. To go through the list and discuss each one in detail would be clearly impracticable at this time, and the limits of my space will permit only a reference to the particular food on which my experience with most of the varieties to which professional attention is, from time to time, asked by the urbane and seductive travelling representative, has led me to rely. My preference is for Carnrick's food. This food is composed of 45 per cent. of powdered milk, 45 per cent. of dextrine and 10 per cent. of milk sugar. The casein is prepared for the infant's stomach by partial predigestion. This food approaches the mother's milk more nearly in composition than any of the other infant foods on the market. My experience with it has been highly satisfactory. It is not liable to decomposition and supplies a desideratum which has long been sorely felt by all who have had any considerable experience in conducting children through the heated term.

While no invariable line of treatment, applicable to all cases alike, can be laid down for "summer complaint," it is well to have formulated a general plan of procedure. It is my practice, when the child manifests symptoms of indigestion, to peremptorily order the discontinuance of all nourishment of whatsoever kind, and for at least twelve hours (and twenty hours is better), allow nothing but pure water. There is no danger of the child's starving. I hope to secure by this abstinence a cleansing of the alimentary canal of the sugar, fæces and acid and acrid products of decomposition which we assume to be the cause of the disturbance. In many cases when seen sufficiently early no other treatment will be reqired. Ordinarily, however, the physician is not called in sufficiently early, and the green, offensive discharge has been well established. Fractional doses of calomel (a grain divided into 10 powders), given every two hours and followed by a dose of castor oil and laudanum (castor oil, ʒ j, laudanum, 2 drops), will then be found to be all that is necessary in many cases. When this fails to check the discharge, I resort to oxide of zinc and bicarbonate of sodium. One grain of oxide of zinc and three grains of bicarbonate of sodium, for a child under a year, makes an excellent powder in cases of looseness apparently due to debility of the mucous lining. It is tonic, antispasmodic and astringent. The sodium salt may be given more freely when there is much acidity; by neutralizing the acid it prevents the formation of irritating salts of zinc. I have had excellent results in cases characterized by offensive odor of the discharges, from the exhibition of salicylic acid and bismuth. From the reputed direct antiseptic action of salol on the intestines, I should be disposed to substitute it for the salicylic acid. The temptation to give opium, for its effect in allaying peristaltic action, is very great; when employed it should be with great circumspection. The nervous or head symptoms in the more advanced cases will demand the bromide of potassium and counter-irritation to the nape of the neck.

Latterly lactic acid has been recommended as a remedy in the green discharges of cholera infantum, and I am prepared from my limited experience with it to use it more freely. It was introduced in this capacity by HAYEM, of Paris, who discovered in the discharges from the stomach and bowels in this affection a distinctive microbe which he found could only exist in an alkaline medium. These microbes are rod-shaped, and manifest a tendency to bunch themselves together. Assuming them to be the cause of the diarrhœa, their destruction by means of the lactic acid suggested itself, that the prevention of butyric acid fermentation might thus be secured. An extensive series of experiments demonstrated the correctness of the theory. Lactic acid has the advantage of palatability and, the following formula, which I am in the practice of prescribing, is taken without apparent objection by the child:

℞ Pure lactic acid, ʒ ss.
Syrup, ℥ ij.
Simple elixir, ℥ j.
M. Sig.—A teaspoonful every hour. This dose is for a child of fifteen months.

It will be seen that I have merely outlined the treatment, but I believe this outline if followed as a guide, will be found to conduct to a very successful therapy of the distressing affection under consideration.

PESSARIES.

BY HENRY CHADWICK, M. D., HART, MICH.

There are many medicines and appliances that have proved a boon to the suffering, in the hands of those medical gentlemen who have been afforded material for large clinical experience, but in the hands of those who have others think for them much damage has been caused, with discredit to the medical profession.

One day in '75, while I was a student at Rush Medical College, I saw the professor of gynecology enter the amphitheatre with a half-bushel basket on his arm, two-thirds filled with what I thought were rings and buckles. He informed the class that they were pessaries, and on investigating the matter, I found that pessaries had a record; that they had been in existence a long time; that for want of rubber rings, links and balls, the ancients used grass, cork, nuts,

and many other things for the relief of certain displacements of the womb, with which I will not burden your patience by enumerating to-day, because, gentlemen, you know too well how these appliances have chafed and erroded the mucous membrane of the vagina and uterus, for me to add anything new that would be of interest.

There is no organ of the feminine body that causes so much pain, melancholy, sickness and death, when diseased, as this little 1½x3 organ, styled the womb.

Under the eye of the gynecologist it has more bends and slides than the Pinafore opera. No organ for which there are so many appliances. If it falls, one to raise it; if it doubles itself, one to undouble it and keep it so; should it throw itself on the urinary billows of the bladder, one to anchor it in its own harbor, or should it wander to the desert and waste rectum, a pretended oasis is ever ready in the form of an other pessary.

The question comes to my mind, Why are so many of these strange devices in existence? Why not have such supports for the rectum and bladder? There is far more danger of these organs being displaced with damage to the patient than this little organ, that can be pushed out of the way by either of them without any discomfort, and yet it would be a radical departure from treatment adapted for derangement of these organs, to suggest that pessaries be manufactured to hold these organs in position. Think, gentlemen, of having placed on you a harness with stem pessary attachment and the pessary inserted into the rectum for hemorrhoids!

There is not a physician practising to-day that can truthfully say he has ever cured a case of abnormal position of the womb by a pessary, unassisted by other remedies.

How do I know this? I answer from the very nature of the cause of displacements of the womb. What are some of the causes? In the beginning irritation; irritation from coition, irritation from abortion, irritation from cold. Irritation, gentlemen, followed by congestion, inflammation, ulceration and destruction of its tissues. In nature's effort to restore this disintegrated structure adhesions are formed, the ligaments have been relaxed and lengthened, the muscular and nervous tone of the organ impaired. Perhaps the womb is highly congested, by which it becomes water-logged, and must sink. What is the remedy? Evidently not to get your pessary jacks under it and screw it up, but pump out the water with your glycerin and absorbent cotton tampon, and destroy the sluggish diseased surfaces either with caustic or by excission, and improve the general health. If the ligaments are too long call in MR. HUTCHINSON and have them cut off. If the wall of one side has become weakened and the womb seems inclined to double up, introduce your dialator and stretch the weakened fibres and they soon will hold the walls in shape, but do not annoy your poor patient by having her wear a rubber ball. Give it to the children and medical students to play with. The same I would recommend you to do with all other pessaries. Perhaps there has been a laceration of the os or cervix and it has healed and drawn the womb backward or forward. If you can not snip the cicatrix easily in two let it alone; do not torture your patient by introducing a link, ring, bent ring, cup or any other kind of a pessary. If there are erosions or ulcers, cure them but do not introduce an agent that will cause them as a pessary will *cause* them, gentlemen, by pressing on the delicate secretory glands and ducts of the mucous membrane, by affording a stopping place for foul discharges.

The idea of inserting a stem pessary with the possibility of the viscera crowding down upon the fundus of the womb, forcing the tissues pressed against to give way. That vesico-vaginal fistula, that recto-vaginal fistula, fibroid tumor and even cancer might be induced by these pessary appliances makes me doubt the ability of those who recommend them. Pessaries are not even safe and respectable placeboes, because they are expensive to watch, they weaken the organ they are expected to support and afford a harbor for secretions most foul.

TREATMENT OF URETHRAL STRICTURE BY ELECTROLYSIS.

BY R. W. ST. CLAIR, A.M., M.D., BROOKLYN, N.Y.

The case I am about to report, I did not intend to write up, but it has been so peculiar, the patient having suffered so much, and as it shows the advantage of the electric current over the old method, I am inclined to give the whole history. DR. M. came to see me, from N. C. He had been suffering from stricture for nine years. Some five years ago, he came to New York and was treated by DR. ——, who cut him, and promised a cure. After suffering a long time, he went home, no better than when he came on. He then went to Boston, and, for nine months, was treated by passing as large sounds through the stricture as could be passed. He grew worse, and had to give up his practice, and was in a very bad condition indeed. About six months ago, he went to Norfolk, to be treated by electricity. The operator inserted the bougie, and turned on the current. To his surprise (and the doctor's also), it became fast, and they could not get it either way. After a long time and much suffering (it was fast, like a rusty pin in a wet blanket), it came away. Discouraged, he went

home, and concluded there was no help for him, and that electrolysis in particular was no good.

He came to see me, during the blizzard of last spring. He was very bad, and could pass his urine only by drops, and at least one third of it was blood. I went to work at the case immediately, and found four strictures. No. 6 French, was the largest I could pass. I found the doctor who had made the attempt to treat him by electrolysis, had used the wrong current. Instead of giving him the negative pole, he had put the positive pole to the bougie (very good reason to become fastened). I took a No. 15 French, connected it with the negative pole, and gave him the positive pole armed with a carbon sponge-covered electrode to hold in his hand, and turned one cell at a time, till he could just feel a slight warmth (12 cells), and in twenty minutes I passed all the strictures and entered the bladder. He immediately passed quite a good stream, and the product of the stricture came away like the cooked albumen of an egg. The next day he walked around the city, and was feeling very well. He returned home, and was to come to me in about a month, when I would put through a No. 12. After reaching home, he was somewhat indiscrete, and did a little too much family duty, and urethral fever set in. As soon as he was better of this, he came on again, and I took him to DR. ROBERT NEWMAN. The doctor operated, the same as I did, and he returned home, to come back in two weeks. When he came again, I was in Michigan, and Dr. NEWMAN kindly took charge of the case till I returned. Two weeks ago the patient could pass a stream over a seven-rail fence. He has gone home again, after having a No. 24 bougie passed through. I want to pass a No. 29 through in a month from now, then he will be cured.

What I wish to say, is this, if so bad a case can be cured (and they can all be cured), without pain, without cutting, or bleeding, and so quickly, is it not far better to treat by the electric current, than any other way? I have never had a case but I could cure in from one to five operations, with no pain whatever, and never have them come back, and complain that they are only partly cured.

FLUID EXTRACT PICHI IN CYSTITIS.

BY R. L. RANDOLPH, M. D., FAIRMONT, LA.

On the 8th of June I was called to see T. M., male, aged 28 years, who, I found, had been in bed nearly two months, suffering with cystitis, a sequence of gonorrhœa. He had during this time been under the treatment of two reputable physicians who had prescribed numerous remedies without affording relief, and becoming dissatisfied he sent for me. Upon examination the urine was found filled with blood and pus. The bladder was very tender upon pressure, and patient stated that he desired constantly to urinate, passing but a few drops which caused him intense pain.

I prescribed the following:

℞ Ext. pichi, fld. (P., D. & Co.), ℥ iij.
Ext. hyoscyami fld., ʒ iij.

Sig.—Twenty drops every four hours.

Also a mixture of liq. ammon., acet. and morphine when pain was very severe.

This young man began to improve at once, slowly but surely, until June 22nd, when he was able to walk about a little and attend to his affairs. On July 3d I saw him at a dance, and he reported himself "as well as he ever was," to use his own expression.

Pichi was used by me in a previous case of cystitis in a female with good success, and I feel assurred that it is of more service than any other remedy we have in the medical treatment of bladder troubles.

Correspondence.

BERLIN LETTER.

(*From our Special Correspondent.*)

The melancholy tragedy which during the last few months was being performed on the imperial throne of Germany, ended a few days ago. Seldom has a prince, as a man, been so near to such a large circle of men as was Emperor Frederick, whose unspeakably sad fate has forced sympathy even from those who do not look with sympathetic eyes upon Germany. No profession, however, is so much touched by the event as the medical, and this may justify some attention in this place to events that have happened in the late past, and above all, to the unenviable part which the English specialist, MORELL MACKENZIE, has played in the course of the disease of the German Crown Prince and subsequent Emperor.

It is known that MACKENZIE opposed the diagnosis distinctly given by the German physicians who treated the Crown Prince at the beginning of his disease. He removed, by an intralaryngeal method, some particles which were claimed to form part of the swelling which the German physicians had discovered on the left vocal cord, which, however, were probably taken from parts contiguous to the swelling. Subsequent developments, at least, warrant this assumption. These particles were given to VIRCHOW for anatomical examination, and he declared in an official report, published at the time in the German Medical Press, that the

section given him for examination offered no justification for the diagnosis of cancer, but he took the precaution to state that the results of this examination formed no decision as regards the nature of the disease. As was well known, the Crown Prince at that time went to England, and MACKENZIE undertook to treat him. PROF. GERHARDT'S first assistant, DR. LANDGRAF, who had accompanied the Crown Prince to England, stated that the cancer knot gradually grew and that a growth towards the right side took place; that MACKENZIE endeavored to remove him (LANDGRAF) from the case, and persisted in denying the malignant nature of the disease. After a short sojourn on the Isle of Wight and in Scotland, the Crown Prince went to Toblach and Tyrol. The reports which MACKENZIE furnished the English and a part of the German press became more favorable, and a cure was reported to be in view. The Crown Prince then went from Toblach to Baveno, and from there, on the 3d of November, to San Remo. MACKENZIE had during all this time followed the system of calumniating the German physicians, which, necessarily, included the defamation of men of the reputation of V. BERGMANN and GERHARDT. MACKENZIE represented himself as the savior of the Crown Prince out of the hands of the German physicians, who were anxious to perform an operation. Everywhere, and not in England alone, the deficiency in German medical knowledge and capacity was strongly criticised. Suddenly there came from San Remo the reports of the sad change which the disease had taken. PROFESSORS KRAUSE, M. SCHMIDT and SCHROETTER were called in consultation. All, especially the latter, gave in the most distinct terms the opinion that the diagnosis was cancer, in which, also, MACKENZIE reluctantly joined, though he shortly after retracted his admission. The total extirpation proposed by the physician was refused. Soon afterwards difficulties in breathing, threatening to life, made tracheotomy necessary. This was performed by DR. BRAMANN, the assistant of PROF. V. BERGMANN.

Subsequently further authorities, namely, PROF. KUSSMAUL (Strasburg), and PROF. WALDEYER (Berlin), were taken into consultation, and these, on the basis of clinical appearances and anatomical examinations, also diagnosed carcinoma. But MACKENZIE stuck to his diagnosis of perichondritis.

It is known that the Crown Prince, in March last year, was called to the Imperial throne and returned to Germany. At that time a surprising change for the better occurred. MACKENZIE continued to defame in the medical press the German physicians, who on their part, without reference to their opinions, officially demanded, had to preserve the most extreme reserve. The relations of the consultants became so strained that PROF. V. BERGMANN requested his discharge from his connection with the case, because it was impossible for him longer to meet MACKENZIE in consultation. Even a few days before the catastrophe it appeared in the journals, to which MACKENZIE furnished his reports, that the early cure of the Emperor might be expected. On the 15th of June the end predicted by the German physicians took place. The autopsy was had on the 16th of June. It proved complete destruction of the larynx through cancer and putrid bronchitis, in consequence of the entrance of decomposing substances. The whole larynx was completely bathed in pus and presented a soft, flabby mass. Of the cartilage frame of the larynx there was hardly a particle left. Paralysis of the lungs had occurred in consequence of the development of odema.

It is impossible, in view of these facts, to see how the English physician adhered to the last to his wrong diagnosis, and the assumption forces itself involuntarily upon us that against better knowledge, be it from any cause whatever, he misrepresented facts, but on this presumption his action against the German physicians appears in a very sad light. Public opinion in Germany, and particularly among the German physicians, is, therefore, adverse to the physician even before the report which the physicians who have treated the Emperor will have to furnish under order of the Government, is published. The collection of evidence establishes more and more the belief that without the unhappy interference of this man, medical science and medical knowledge might possibly either have prevented the sad catastrophe which occurred under his management of the case, or removed it to a later day, and have spared to his people for a considerable period one of the noblest men who ever sat upon a throne.

FOGYISM.

Habit plays an important part in the affairs of life. It may be seen exerting its influence in all departments of trade, among all classes of professional men, and in all systems of education.

Among the professions, that of medicine is prominently conspicuous. Physicians form the habit of prescribing a certain remedy in a particular affection, or the employment of a certain plan of treatment to the exclusion of all others, until they come to look upon it as the only proper procedure. They look with equal disdain upon the researches of the modern investigator into the therapeutic effects of agents more or less unknown, and upon the hard-earned results attained by the researches of the pathologist. They see no good to be derived from instruments of precision, whereby disease

is compelled the more surely to yield up its secrets, and the noble little hypodermic syringe has received from their hands many cruel blows. Old lines of thought have evidently permanently altered the structure and arrangement of their cerebral cells. Their perverted proliferation has become a chronic habit, with automatic manifestations. If new processes are set up, however well elaborated, the idea is still in danger of receiving an incoherent expression. True aim goes for naught if the bore is rusty.

Unto those practitioners the mere mention of the word microbe is a signal which rarely fails to elicit fight. It is like unto flaunting the red flag before the burning optics of His Majesty the unemasculated bovine. They scent danger in the very coloring of the atmosphere. It is portentous. In the hands of one of these ancient specimens of the medical practitioner, the tiny instrument by means of which the recent graduate has a much more complete control over a severe case of sporadic cholera than the practitioner of half a century, will appear about as graceful as a crowbar in the hands of a society dude. To that class of physicians who endeavor to exalt medicine to the rank of a science—at least to render it more scientific—they offer nothing but contumely and derision—the arguments of the contracted and ignorant mind. The former are workers. The latter have outgrown their willingness and capacity for work, assuming the discovery that the practice of medicine is only a species of humbuggery, and have, consequently, become obstructionists to the onward march of expanding intellect. They are drones, and the working bees in the medical hive will soon sting them out. They are useless to the profession. They would destroy without offering a substitute for that which is destroyed. They have much to say about nature—that she rids the individual of disease. It would be interesting to learn what *is* this *nature*, concerning which they speak with so high a degree of learned confidence, and, also, *how* does she accomplish her object?

If any man doubts these things, let him study the results attained by operators now, as contrasted with their work, for instance, before the institution of antiseptic operations, and the antiseptic after-treatment of surgical, gynecological, and obstetrical cases. He may then turn and contrast with these the medical mummy, who, if not too dessicated, would verily frown upon the progress thus demonstrated.

M. F. CUPP, M. D.

METAMORA, IND.

CASCARA SAGRADA IN RHEUMATISM.

July 26th I had occasion to go to St. Louis, on business. In consequence of having to take an early morning train I was prevented from having my usual rest. The day was very hot, and I was obliged to exert myself. That night I had a chill, which was followed in the morning by rheumatism in the left shoulder, accompanied by swelling of the joint. Stayed in the city over Friday, hoping to feel better the next day, but did not, and returned home Saturday. That night I took 4 or 5 grains of quinine in one-grain doses, to prevent a recurrence of a chill.

Having read surgeon H. T. GOODWIN'S article, "Cascara Sagrada in Rheumatism," in the Kansas City Medical Record, I resolved to try that remedy myself. So on Sunday morning I took a dose, and repeated it twice daily for three days, discontinuing the quinine. To-day (Wednesday) the pain and swelling has left me, and I consider myself completely cured.

W. M. DUNN, M. D.

CUBA, MO.

The tongue is an important index to constitutional disturbances, in the practice of the homœopathy, and one is struck with wonder and awe at the variety of appearances it is liable to assume in disease. These appearances may of course be duplicated by the action of homœopathic drugs, which same drugs must be given when the condition occurs idiopathically. A writer in the Hahnemannian Monthly occupies four octavo pages of small print with his enumeration of such appearances and the drugs which cause and cure them. We have space for only a short selection: "TONGUE: Aphthous—*Æthus.*, *borax*, *illic.*, *merc.*, *nux v.*, *phos.*, *plumb.*, *sulph. ac.* (in spots). Bites it—*Absinth.*, *diosc.*, *ign.* (when talking or chewing), *phos. ac.* (the side involuntarily; also at night), *thuja* (frequently). Catches behind teeth—*Laches.* Difficult to move—*Ant. tart.*, *apis*, *arg. nit.* (from spasms), *bapt.* (thick), *carb. v.* (heavy), *colch. con.* (feels tied up), *cyclam* (scalloped), *kali bich.*" One can scarcely read such an article and not be impressed with the size and delicacy of the brain that can comprehend it.

A writer in the Weekly Medical Review reports a case in support of his theory that the sex of the child can be foretold by the presence or absence of the vomiting of pregnancy. When the woman is troubled with morning sickness, he says, the child is a girl, and *vice versa*. This sign may hold good in some instances, but no one who has been observant in this direction will hold that it is to be depended on. Everyone knows, too, that there are women who have gone through numerous pregnancies without the slightest disturbance of the stomach. There is no reliable sign of the sex visible until after birth.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., AUG. 10, 1888.

Editorial.

THE KIND OF MEN WHO SUCCEED.

It has been said that "those can conquer who but think they can," but this is not literally true. Confidence in one's self is, unquestionably, a *sine qua non*, although it may exist to a degree which proves self-destructive. The man who distrusts himself cannot reasonably expect others to trust him. Life is a battle, and, while the most courageous are sometimes knocked out, it is only they who, with firm heart and clear head, strike out boldly from the shoulder, who keep on top. The diffident, faltering, half-hearted may succeed, through the favorable circumstances which surround them, in keeping alive, but theirs is a negative existence. The conditions of success are largely innate, and while it may be correct as a political dogma to hold that all men are born equal, the stern facts of post-natal life disprove the literal truth of the declaration. Men are largely automatons and work according to the manner of their construction.

In a recent lecture, delivered before the Faculty of National Sciences, at Montpelier, M. Laponge distinguished four types among men. That which possesses the essentials of success is clearly distinguishable:

1. The initiators, who show mankind the way into the region of the unknown, and who go in front. Restless and daring, with an intelligence which is, at least, equal to the average, men of this type do not travel readily along beaten tracks. New ideas are the breath of life to them. They spend their lives in new creations; they are often wrecked, but the true genius represents the most perfect form of this type.

2. Men of spirit, of intelligence, who, possessing no creative power themselves, yet carry out and perfect the ideas and discoveries of the first type, to which they are really the complement.

3. Men who, with much or little intelligence, can work only with others, who mistrust every new idea not accepted by all the others, but who sieze it with avidity when their neighbors adopt it. If intelligent, these men are docile, but they dislike every change in routine, and they represent the dullness of the mass in the face of every reform.

4. Men of this type are not fit to attain even the smallest step in culture.

Evidently every man cannot be classed under one or other of these divisions. In human societies clear lines of demarcation do not exist, but for general purposes the distinction is sufficiently evident. The superiority of a race or nation depends on the greater or smaller number of men of the first two classes. The race which is the richest in the first type is the blonde dolichocephalic, and this has been the case even when the people among whom they lived were not of this kind. In Egypt, Chaldea, Assyria, Persia, and India, and even in China, men of this type ruled. In the Greek and Roman world it was the same, and it is so still. In our own day the rank of a nation corresponds with the strength of the blonde dolichocephalic element. The Gallic and Frank elements which made France great, were of this type, and it plays the same part in England, Germany, and America. Near these came the Semitic and Mediterranean races, who had reached a high grade of civilization when the blonde dolichocephalic peoples were still savages. The remainder of mankind must be reckoned the passive races. The brachycephalic races of Europe, the Celto-Slavs, rarely produce men of the first intellectual type. In the social changes of recent years brachycephalic men, who form the lower classes, have been elevated and brought forward, and herein, the lecturer thought, lies the great danger of the future deterioration of the French nation. The existence of the superior blonde dolichocephalic type is threatened by amalgamation with the dark brachycephalic and inferior races.

THE LATE EMPEROR FREDERICK'S THROAT.

The report on the post-mortem examination of the late German Emperor's throat has been published. It shows beyond question that the disease of which the Emperor died was cancer, and that Sir Morell Mackenzie was, purposely or ignorantly, in error. The statement expected from him has not yet been published. It will be remembered that the section furnished Virchow was pronounced by that eminent pathologist to be benign, and the report to that effect was referred to as an endorsement of Sir Morell's diagnosis. Our Berlin correspondent, however, now intimates that the cutting was not from the growth but from adjacent healthy tissue, and removed from there for a special purpose.

The microscopical report on the post-mortem

is signed by VIRCHOW and WALDEYER, and is as follows:

1. The larger nodule at the base of the epiglottis shows, on the outside, still unchanged mucous membrane with cylinder epithelium, but in the interior, an alveolar structure with epidermoidal contents. The cells of the latter are large and highly developed; concentrically arranged cell-groups were not observed.

2. The cutaneous nodule on the right side of the wound in the neck is covered with extremely attenuated, but otherwise unchanged, epidermis; the cancerous proliferation reaches close to the surface; its chief development is situated in the deeper parts, where also, here and there, "nests," with a concentric arrangement of cells, occur. Some normal constituents, such as sweat-glands, are to be seen between the cancerous masses.

3. The lymphatic gland on the left side of the neck shows the highest degree of change. The normal structure has disappeared, and is replaced by a loose alveolar tissue, the spaces of which are closely filled with epidermoidal cells having large nuclei; many of these cells possess small, bristle-like fringes (*Bürstensäume*).

4. The contents of the bronchial tubes correspond exactly in their composition with the description given by the undersigned PROFESSOR VIRCHOW in his report of May 19th of the present year) on the solid particles found in the expectoration. Moreover, in certain places, a more abundant collection of small, bright fat-globules, like the globules in milk, was observed.

5. In the foci in the lungs were found thick clusters of pus-cells, but no cancer-cells. The natural alveolar structure was still perfectly distinct.

Notes.

The Reno Gazette describes the method of treatment adopted by a Piute medicine man in the case of a sick papoose, evidently suffering from some abdominal affection. The patient was lying on a rabbit-skin robe, the medicine man kneeling near the papoose, and between him and the patient a large arrow was stuck in the ground. He had four assistants sitting in a semi-circle on his right and kept up a continuous dismal howling in which his quartette of assistants joined at intervals. After chanting, the medicine man arose to his feet and walked around a small fire in the centre of the enclosure seven times, chanting and beating time with a bunch of "deer nails" tied with a string to the end of a round stick, which is used as a charm to keep evil spirits away. With a wild yell he again dropped on his knees, bared the papoose's abdomen and began sucking its umbilicus for about five minutes. During this process his four assistants kept up a continual howling. The medicine man again arose to his feet, walked around the fire while a noise was heard in his throat as if in the act of gargling. The above process is continued until the patient recovers or dies. Fees are not exorbitant, as if a cure is effected three dollars is the compensation allowed. On the other hand, if three consecutive patients die under the treatment the practitioner is cremated alive.

CHARCOT'S success has been very remarkable. DR. EDWARD WARREN BEY writing to Gaillard's Medical Journal recalls the time when the great clinician was an humble *Chef de Clinique* in Piory's service, and only too happy to supplement his modest salary by the fees derived from instructing a class of American students. He is now the busiest practitioner in Paris and has, probably, the largest income of any living physician. His success is the result of his own effort and has not been contributed to by either friends, family or fortune. He has conquered through a combination of high aspiration and fixedness of purpose. "The light which has illuminated his pathway and guided him to fame and fortune has been the midnight lamp, which with unfaltering persistency and courage, be kept trimmed and burning, until its rays, commingling with those of the morning, have dissipated the darkness and ushered in a day brighter and more glorious by far than he had hoped to behold even in the most sanguine hour of his young ambition's dream." In other words, CHARCOT'S genius, like the genius which always wins, has chiefly been his ability to work.

It is related that during the late EMPEROR FREDERICK'S visit to consult DR. MACKENZIE, the doctor was entertaining an American laryngologist whom he requested to examine the case with him. FREDERICK pleasantly remarked during the examination that he supposed the doctors found a royal throat much the same as other men's throats. The Yankee's quick response that they hoped soon to make it the same as other men's throats, pleased his Royal Highness very much, and he ventured to remark further, straightening himself up and inflating his massive chest, that he was otherwise all right. Our compatriot, after looking him over critically, replied that with the exception of his throat he had the material for a first-class American. The Emperor was much amused, but the German physicians who were present were much shocked at the American's presumption in thus familiarly addressing royalty. The "divinity which doth hedge about a king" had no terrors for the son of the Republic.

At the late meeting of the Pennsylvania State Medical Society a member convulsed the meeting by moving the adoption of a resolution requiring the President-elect to take the following "hypocritic oath:" "Having been duly elected President of this Society, do you promise to hold the Pennsylvania Medical Society, as it has been held by many illustrious men, as a stepping-sone to success, as a round in the ladder of fame, as a lemon to be squeezed, as a lever to raise your hopes, as a block and tackle to exalt your ambition, as a peacock's feather in a jackdaw's tail, as a lion's skin on a sheep, a spur on knighthood's heel, a garter on the leg of a courtier, a medal on the breast of a hero and a convenient method of advertising your business, and that as soon as your time expires you will forever turn your back on it and ignore it? Selah!"

A letter written by DR. DANIEL DRAKE over forty years ago has been resurrected. It was a statement of the opinion entertained of medical societies in those days; "Of the great utility of such conventions to those who compose them, if for no others, there can be no doubt; and that when the time shall come that they are numerously attended by the physicians of every State in the Union, the profession in the United States will be found advancing in aspiration and in intelligence much beyond anything we have yet seen." Referring to a medical convention at Columbus, Ohio, he says "there was emulation without rivalry, and wit without wine."

A new evening newspaper has been established in New York, and as an advertising scheme it has engaged a physician whom it pays to treat the sick children of parents who cannot pay for their treatment. The physician puts in his leisure moments in writing for the paper articles on the preservation of the health of children. All the poor people must, of course, read the newspaper in order to avail themselves of the peculiar benefits which it dispenses. It is hoped that the doctor is paid a liberal salary for services which are thus doubly beneficial.

The following tribute to the value of pulsatilla appears in all seriousness in the Eclectic Medical Journal: "If you meet a married couple who are hunting a child to adopt, give them pulsatilla and send them home. I know it will not cause conception without coition, but I am sure that it exerts a wonderful influence with those who are cohabiting; that if one will put a few drachms in a public well, every woman in town who is cohabiting will bring a child. So I would warn the ladies who are guilty of this practice, and desire to keep it to themselves, to beware of pulsatilla."

We were honored on the 6th inst., by a visit from DR. LANPHEAR, of the Kansas City Medical Index. The doctor is a type of the young men (between thirty and forty) who are leaving the impress of their work on Western Medicine. Of fine physique, to support the work of a bright and vigorous brain, and filled with enthusiasm in his calling, it is not strange that he and his kind have their feet firmly planted on the road to success.

It was an observant student who, when asked in his examination, how many legs have insects? replied: "65 per cent. of insects have no legs at all, 11 per cent. have one, 14 per cent. have two or three, 10 per cent. four or five, but none six." "How in the world did you get this answer?" asked the professor. "By carefully examining the collection belonging to the University," was the reply.

DR. KOHLER, the discoverer of the anæsthetic properties of cocaine, has removed from Vienna to New York. Had he patented his discovery, he would by this time have been able to accumulate a fortune sufficient to enable him to wait an indefinite time for a practice in his new home. Perhaps, though, his fame as the discoverer may assist him to an immediately lucrative practice(?).

The St. Louis Medical and Surgical Journal declares that "*acta non verba*" are the pressing want of the profession. We have not the least doubt that our contemporary has diagnosed the case correctly, and that his prescription is *secundum artem*. It has given no direction for use, and we suppose the remedy is to be taken *pro re nata*.

BILL NYE, having been invited to attend the dinner at the recent annual meeting of the Indiana State Medical Society, was unable to attend, and he sent his regrets by wire in this shape: "Sorry I cannot be there. May you and your associates continue to take life easily, as heretofore."

From Life: Young physician (inspecting citizen on the floor at the police station)—"This man's condition is not due to drink. He has been drugged." Officer Mc Ginnis—"You're right. I drug him, myself, all the way from Casey's saloon, two blocks down the sthreet."

Important if true: An atomized ether spray directed on the region about the external auditory meatus, it is claimed, will produce through the distribution of the trigeminus an anæsthesia quite sufficient to annul the pain of drawing teeth.

LAWSON TAIT avers that the ovaries have as little to do with sexual feeling as the front teeth.

popular opinion to the contrary notwithstanding. Laparotomists have thus had removed one of the most weighty obstacles to their brilliant operations.

Harper's Bazaar ventures the opinion that it does not require any very great amount of intellect to shoe a horse, but that there is a fortune in store for the man who can shoo a fly so that the little pest will stay shod. We should certainly think so.

The Philadelphia Medical Times: "The conditions formulated by the Committee on Infants' Foods at the late meeting of the American Medical Association are approximated more nearly by Carnrick's Food than by any other with which we are familiar."

"Vanity is a disease," says Uncle Esek, "and there is no cure for it this side the grave; and even there it will often break out anew on the tombstone."

Book Notices.

A Clinical Atlas of Venereal and Skin Diseases, Including Diagnosis, Prognosis and Treatment. By Robert W. Taylor, A.M., M.D., Surgeon to Charity Hospital, New York, and to the Department of Venereal and Skin Diseases of the New York Hospital; Late President of the American Dermatological Association. Illustrated with one huddred and ninety-two Figures, Many of them of Life Size, on fifty-eight beautifully colored plates. Also many large and carefully executed engravings throughout the text. Parts I and II—Venereal Diseases.

Philadelphia: Lea Brothers & Co.

The fact that it was announced some months ago that the enterprising publishers had under way an Atlas of Venereal and Skin Diseases by Dr. R. W. Taylor, set the profession on the *qui vive*, for it was taken for granted that the reputation which both author and publishers have achieved ensured a work of superior merit. The first two numbers of this Atlas are now before us. To say that they justify the most sanguine expectations entertained of them would not be excessive praise. While the work, as it appears in the two numbers before us, is an Atlas, containing illustrations true to life of the diseases discussed, the text is as full as that of ordinary treatises on syphilography and dermatology. The author has had many years of very extensive practice, and he has selected the illustrations from cases occurring in his own experience, as well as from a collection of original paintings from life.

"The text has been designed to furnish the general practitioner with clear and explicit directions for the proper management of his cases, and at the same time to stimulate the interest of those who may wish to devote their life-work to these subjects. A full statement of the clinical history, varying features, etiology, diagnosis and prognosis has therefore been followed by definite and complete therapeut ical information, and due space has been allotted to the fundamental principles which must always be the source of the most deep-seated and successful interest in any branch of science. A peculiar feature is found in the short clinical description of each of the figures, the resemblance of which to a lecture over the living subject, will make clear the advantages thereby secured.

To gather and prepare such illustrations, and to weave them into a comprehensive fabric with appropriate text, is an undertaking which rapidly increases in difficulty according to the conscientiousness of its performance, and the adequate execution of an enterprise of this nature requires long preparation and consideration, and a large outlay. In their respective spheres, the author and publishers have left nothing undone in the effort to make the Clinical Atlas a work which will be recognized as the standard authority on its subjects. The strong faith of the publishers in the merit and wide appreciation which they must feel assured awaits 'The Clinical Atlas' at the hands of a discriminating medical public is evidenced by the very moderate figure at which it is supplied —a figure so much below that customarily charged for works of this class that only the widest dissemination can possibly bring to them a fair return for their evidently lavish outlay."

The work is sold on subscription. It will be completed in eight folio parts, measuring 14x18 inches There will be about 400 pages, of the same size, in the text. The price per part is $2.50, and two parts are to be issued every two months. The work is one of the triumphs of the modern publishers' art.

The Physicians' Leisure Library—The Infectious Diseases, Vols. I and II. By Karl Liebermeister: Translated by E. P.Hurd, M. D., Newburyport, Mass. Published by George S. Davis, Detroit, Michigan.

The present treatises are valuable and important contributions to the subject of Infectious Diseases, from the pen of a clean and accomplished physician, who has had unusual opportunities of investigating disease, and is therefore entitled to speak with authority. The chapters before us, from the extensive work of the author, bear emphatic testimony that the writer of them is an acute and painstaking observer and teacher; accuracy of statement and good judgment are everywhere manifest, and the conclusions are generally based upon facts, and these facts are made to bear upon the question treated. They are free from speculative details and of decided practical utility, as well as compact in form. The prevention of

infectious diseases and their description are carefully given, and leave little to be desired, although their treatment is often meagre, and the well-known remedial agencies in use in this country are omitted. For instance, in the treatment of small-pox there is nothing said about sarracenia purp , a very valuable remedy.

It is often a difficult task to preserve due proportion between the more and the less important subjects, but in the volumes under review this has been accomplished. These volumes are truly a fairly accurate reflex of the exact state of our knowledge of infectious diseases, the progress since their writing, three years ago, being supplemented by the translator, who has enriched the subject with remarks and comments of his own and also notes from the leading authorities of the day.

As a translator, DR. HURD presents a combination of qualities rarely seen in those who generally undertake such tasks. The doctor possesses marked powers of observation, much reading, varied learning, sound judgment and excellent medical discrimination, good style, firmness in the assertion of his opinions, although modestly couched, and his facts are well digested and assimilated. The translation of this text-book from the German will add still further to his high reputation as a writer, and will convince all that he has the whole literature of zymotic diseases at his fingers' end.

The above volumes are remarkably cheap, 25 cents each, of convenient size, and may be often profitably consulted by practitioners who are too busy to refer to more extensive works. The publishers have not failed in their endeavors to make this series of manuals attractive, trustworthy and thoroughly useful. There is a good index. In fact, we cordially commend the book to our readers.

DIET TABLES. Issued by Reed & Carnrick, New York.

These diet tables have been revised and corrected by thirty of the most eminent specialists in this country and Europe. They are designed for the use of patients or nurses, and obviate the expenditure of time required in giving directions and answering questions. The selection of foods and the formulæ given are such as must commend themselves to every experienced practitioner. Diet and regimen are given for the various distinct diseases to which flesh is heir, as well as for the disturbed conditions of the system which cannot properly be classified as diseases. The tables will be sent free, on application, and there is no excuse for failure on the part of the practitioner to avail himself of their great aid.

Therapeutic Brevities.

The following formulæ, developed in the practice of Dr. Hayden, are re-published by the Medical World from his pamphlet "Optimus :"

HEMORRHAGES OF THE LUNGS AND ALL DANGEROUS INTERNAL HEMORRHAGES.

℞ Saturated tincture secale cornutum,
Saturated tincture cinnamonum cort.
Saturated tincture ol. erigoroin canadensis, ää, ℥ j

M. Sig. Thirty to sixty drops on sugar, or in mucilage, and repeat as often as required until the hemorrhage is controlled, when smaller doses should be given on extended time. For local hemorrhage of any part of the body, where this preparation can be applied, it will be found of great efficacy as a safe styptic, especially in epistaxis.

PUERPERAL CONVULSIONS AND PERITONITIS.

℞. Saturated tinct. veratrum viride, ℥ j

Sig.—Fifteen to thirty drops, and repeat every half hour, keeping the patient partially under the influence of chloroform. Should great prostration follow, give teaspoonful doses spirits vini gallici, until a reaction sets in. The veratrum viride is, without exception, the most reliable of all remedies in puerperal convulsions. The writer has given as high as sixty-drop doses, with the most happy and gratifying results.

AMENORRHEA.

℞. Saturated tinct, helonias dioca, ℥ ij
" " viburnum opulus.
" " prunus virginiana.
" " scutellaria lateriflora.
" " caulophyllum thalictroides, ää, ℥ j
Saturated tinct. zingiber officinale, ʒ ss.

M. Sig.—Thirty drops, three times a day.

The addition of an equal part of simple syrup will make it much more agreeable to the patient. A superior remedy, when the articles are good and properly made, for amenorrhea, leucorrhea, and relaxed conditions of the uterus. For barrenness and lack of sexual tone, this preparation will be found of much service.

INCONTINENCE OF URINE IN CHILDREN.

℞. Saturated tincture gnaphalium plantaginifolia (Mouse Ear), ℥ ij.

Sig.—Thirty to sixty drops every night, at bed-time.

Where the tincture cannot be obtained, an infusion may be substituted.

Vaginal Lotion.—For leucorrhea, relaxed condition of the mucous membrane, excoriations and irritation.

℞. Tincture geranium maculatum.
" hamamelis virginiana, ää ℥ ij.
" hydrastis canadensis, ℥ ss.
Aquæ bullientis, ℥ xiss.

M. Et filter. Sig.—Inject freely night and morning.

Lotion, No. 2.

R. Tincture geranium maculatum, ℥ ij.
" iris florentina, ℥ ss.
" sodæ boratis, ʒ j.
Aquæ bullientis, ℥ viij.

M.—Et filter. Sig.—As often as required.

Lotion, No. 3.—For fetor.

℞. Tincture quercus alba, ℥ ij.
" baptisia tinctoria.
" ligusticum lenisticum, ää ℥ j.
" carbolic acid, pure crystals, ʒ ss.
Aquæ bullientis, ℥ xij.

M.—Et filter. Sig.—To be used freely two or three times a day.

Lotion, No. 4.—For inflamed eyes and sore nipples.

℞. Bay leaves.
Rose leaves, ää, ℥ ss.
Quince seeds.
Borax, ää, ʒ j.
Glycerin, ℥ j.
Boiling water, ℥ xiv.

M.—Steep slowly for fifteen or twenty minutes, and when cold strain and add one ounce tincture opii.

Sig.—Apply freely and often. This is a very valuable lotion, and will also be found of service as a wash for infants troubled with scalding and chafing.

Long experience and observation has led the writer of these pages to the conclusion that in the majority of female complaints (if not in all), there is an acid condition of the fluids, particularly of the mucous membrane, and that this acid state should be neutralized as the first step in a successful treatment. Acting upon this conclusion, he has been in the habit of prescribing the following preparation as preliminary to a tonic and restorative medication, with results the most gratifying:

℞ Rhei pulvis, ℥ j,
Sodæ bi-carb., ʒ ij,
Cinnamomum pulvis, ʒ j,
Aquæ bullientis, ℥ xvj.

M.—Steep for half an hour slowly, then strain and add,—

Tincture ol. mentha viridis,
" ol. mentha piperita, ää ʒ j,
Spirits vini gallici, ℥ iv,

Sig.—One tablespoonful every night for a week.

Antiseptic Bandages.—The inefficacy of bandages, etc., prepared with sublimate alone has led Dr. Laplace to examine into the causes which produce this condition of things. He has determined that the chief reason is the formation of insoluble albuminate of mercury by decomposition of the bichloride in contact with the cloths and materials used in their preparation. This may be avoided, as he has demonstrated, by the presence of an acid in the sublimate solutions used for asepticizing the bandages, gauze, etc., and of all the acids with which he experimented, tartaric acid seems to be the best. When this acid is added to sublimate solutions, not only is the formation of albuminates avoided, but the antiseptic effects are increased in a remarkable manner—thus enabling a smaller percentage to be employed; and, moreover, so fully answering all demands that the collateral use of iodoform, etc., is rendered entirely unnecessary. The acid solution is also less irritating to wounds. The following are Laplace's formulæ as gleaned from La Gazzetta degli Ospitali:

Take of

Bichloride of mercury, 5 parts,
Tartaric acid, 20 parts,
Distilled water, 1000 parts.

This solution is for irrigations, etc.; but when antiseptic bandages, gauzes, etc., are to be prepared, the following is recommended:

Take of

Bichloride of mercury, 5 parts,
Tartaric acid, 20 parts,
Distilled water, 100 parts.

Mix.

The material should be submerged in the fluid and left there for at least two hours. We would suggest that the softness and suppleness of the bandages, etc., would be very much increased by the addition of a small amount of glycerin, say one part to each hundred parts of water.—*National Druggist.*

NEURALGIA.—The therapeutics of neuralgia has been enriched recently by two good prescriptions, viz.: LABORDE'S pill of aconitine and GALEZOWSKI'S pomade of menthol. The first is made as follows:

Take of

Crystallized nitrate of aconitine, 3 grs.
Neutral hydrobromate of quinine, 300 grs.
Syrup of quinine, q. s.

Make into a mass and divide into 200 pills. The pomade is prepared as follows:

Take of

Menthol, 15 parts,
Cocaine, 5 parts,
Chloral hydrate, 3 parts,
Vaselin, 100 parts.

Mix.

Rub well into the painful part.

PAROSI'S HEMOSTATIC COLLODION.—

Collodion, 13 fl. ozs.
Carbolic acid, 1 troy oz.
Tannin, 5 drs.
Benzoic acid, 3 drs.

Mix.

This is very similar to our styptic collodion.

Lice and other parasites are removed from the hair quicker and better by a decoction of quassia, to which a little borax and glycerin have been added, than by almost any other known means.—*National Druggist.*

For chafing, due to heat, an ointment made of 1 part of boracic acid, 10 parts of talc, and enough vaselin, or of a mixture of vaselin and lanolin to make it easily applied, heals like magic and gives instant relief.—*National Druggist.*

LUGOL'S SOLUTION.—(Liquor Iodi Compositus.)

℞ Iodi, v parts,
Potassii iodidi, x parts,
Aquæ destillatæ, lxxxv parts.

M. S.—Dose ♏ j to x, well diluted.

ANTISEPTIC TOOTH-WASHES.—At a recent meeting of the Odontological Society of Pennsylvania, Leffman reported his experience as follows:

Several formulæ for antiseptic tooth-washes have been offered as fulfilling the indications here referred to, and, with a view of testing the practical value of these, I made up two forms, and present them for consideration by the members. In my opinion they are both rather strong, and can only be used very much diluted with water. This will, of course, interfere greatly with their antiseptic effect. Besides this, they are necessarily retained in the mouth for a very short period, and even if we suppose that they penetrate into all parts of suppurative structures, they do not remain long enough to do any good. I give herewith the two formulæ, both of which I have used, and find the first the more agreeable:

℞ Thymol, 4 grains.
Benzoic acid, 45 grains.
Eucalyptol, 220 grains.
Alcohol, 3 fluid ounces.
Oil of wintergreen, 25 drops.

Use a teaspoonful in about three tablespoonfuls of water as a wash.

℞ Thymol, 20 grains.
Alcohol, 1 fluid ounce.
Glycerin, 1 fluid ounce.
Water, enough to make one pint.

Use as above.—*Dental Cosmos*, Feb., 1888.

DR. CARL SEILER'S ANTISEPTIC SPRAY FOR REDUCING ACUTE AND SUBACUTE INFLAMMATION OF NASAL MUCOUS MEMBRANE.—

℞ Sodii bicarb., ʒ viij.
Sodii bibor., ʒ viij.
Sodii benzoate,
Sodii salicylate, ää gr. xx.
Eucalyptol,
Thymol, ää gr. x.
Menthol, gr. v.
Ol. gaultheria, gtt. vj.
Glycerin, ℥ viiiss.
Alcoholis, ℥ ij.
Aquam, q. s. 16 pints.

This formula gives a solution which is sufficiently alkaline to dissolve the thickened secretion adhering to the nasal mucous membrane, and as it is of the proper density, it is bland and unirritating, leaving a pleasant feeling in the nose. At the same time it is antiseptic and acts as a deodorizer, being in this respect far superior to Dobell's solution or any other non-irritating deodorizer and antiseptic. As it is, however, inconvenient for many patients to have so large a quantity of solution on hand, one of our Philadelphia druggists made the solid ingredients into a compressed tablet, so that one, when dissolved in two ounces of water, will make a solution identical in its effects with the solution made after the above formula, and my patients prefer the tablets to the solution.

Medical Progress.

THE COMPARATIVE VALUE OF CODEINE AND MORPHINE IN THE TREATMENT OF DIABETES.—In a paper published in the Practitioner for July, J. Mitchell Bruce, M. A., M. D., L. R. C. P., London, reaches from an exhaustive study of the therapeutics of diabetes the following conclusions:

Pyrogallic Acid had no discoverable influence on the disease; but the small doses in which the drug was exhibited, as compared with those given to dogs by Dr. Noel Paton, could hardly have been expected to produce a marked effect on metabolism.

Phosphate of Codeine made an impression on the urine, diminishing the volume, lowering the sp. gr., and reducing the amount of sugar.

The maximum result was obtained about the fiftieth day of its administration, when no less than 27 grs of the drug were being taken *per diem* by the man, 22 grs. by the boy. The sugar was never completely removed from the urine of the man, the minimum excretion being 620 grs. *per diem*. In the case of the boy the sugar disappeared for one day only, rising on the next day to 340 grs. Therewith the body-weight in the case of the man had risen from 8 st. 10 lbs. to 9 st. 2 lbs. in the course of seven weeks; and the physical vigor increased at the same time. The activity of the nervous system was but slightly impaired: there was only occasional diurnal sleep, but the boy frequently complained of headache. The appetite continued good, the thirst moderate. But in spite of the very large doses given, the codeine had not afforded us complete control of the glycosuria, and there was occasionally considerable increase of the excretion—thus on March 18th, 1887, when gr. 28 were being taken, 930 grs. of sugar were passed. It is possible that if the dose had been pushed still higher, say to gr. 45 *per diem*, as given by Dr. Cavafy,* the glycosuria might have been entirely arrested. The cost of the drug, and the expense and labor attending the investigation as a whole, did not permit us to continue these observations longer.

With the gradual reduction of the dose of the codeine the sugar steadily rose in amount; a further proof of the influence of the drug.

The effect of acetate of morphine upon the excretion of sugar was even more striking than the effect of the codeine—certainly more rapid and more powerful. The sugar fell steadily in amount, and finally completely disappeared when 5.8 and 6.3 grs., respectively, of the salt were being given *per diem*. The volume of urine declined from 1,700 c.c. to 1,000 c.c. in the boy, from 2,450 c.c. to 1,800 c.c. or less in the man; the specific gravity was lowered from 1046 to 1020 in the boy, from 1034 to 1012 in the man. The patients' condition otherwise underwent a corresponding improvement: the boy gained four and a half pounds in weight, the man seven pounds, and they expressed themselves as feeling in excellent health. Most important of all from our present point of view, the patients were never found sleepy or heavy or dull during the day, but on the contrary, bright, cheerful, and vigorous. Indeed it appeared as if the older patient suffered from insomnia, for he complained that he did not sleep more than two or three hours during the night. The pupils were slightly contracted in both cases; the boy continued to suffer from headache.

The comparative value of codeine and morphine in the treatment of these cases may now be estimated. But first I wish to make it perfectly clear (as I tried to do in my former paper on this subject), that I regard the results as applying only to the two cases actually before us. It would be unwise, and a step unwarranted by other experience, to conclude that what was found in these two instances may be extended to every case of diabetes, or affords sufficient ground for a generalization on the relative value of morphine and codeine in this disease. As far as they go, the results are decidedly in favor of morphine.

Three tests may be applied: (1) the test of power; (2) that of cost; and (3) that of safety.

First, of the two drugs, morphine proved to be unquestionably the more powerful. It completely removed the sugar from the urine in both cases, which codeine did not; and when the excretion was greatly reduced, morphine obviously controlled it more completely than codeine, under which occasional increases of the sugar occurred.

Secondly, the amount of morphine required to produce the maximum amount of benefit was but one-fourth that of codeine. The best effect was obtained from about 6 grains of acetate of morphine *per diem*; from phosphate of codeine not until about 30 grains (= 21 gr. of codeine) were being given *per diem*. This is what might have been anticipated from our knowledge of the relative doses of the two alkaloids, but it is a very important fact nevertheless from the point of view of expense. Codeine costs 18s. per ounce; acetate of morphine costs but 5s. 9d. per ounce. A patient consuming 6 grains of acetate of morphine *per diem* would therefore be treated at about one-twelfth the cost of another taking 21 grains of codeine.

Thirdly, the important question remains to be discussed whether the drawbacks connected with the exhibition of very large doses of morphine in diabetes are not greater than those which attend codeine. Dr. Pavy appears to have been of this opinion, as the result of his hospital experience recorded in the paper already referred to, which must be regarded as the source from which most of our recent writers on the treatment of diabetes by codeine have drawn either their information or the suggestions for their personal observations. He says: "The great advantage of codeine over opium and morphia is that it is equally efficacious in controlling the disease, and does not exert the same narcotic effect."

I can but submit, with all the deference due to so distinguished an authority as Dr. Pavy, that in the cases of diabetes I have treated with morphine or opium, narcotic symptoms rarely have presented themselves as long as the sugar continued to fall, when the drug was given every three or four hours by the mouth. I have found very decided evidence of the cerebral action of morphine in diabetes when the hypodermic method was employed. In the two cases recorded in the present paper the histories show that no unnatural sleepiness was produced by the morphine any more than by the

*St. George's Hospital Reports, vol. ix., p. 675.

codeine; indeed, the former drug appeared to produce insomnia in the older patient.

Valuable as opium, morphine, and codeine are in the treatment of diabetes, the large size of the dose that has to be given of these powerful drugs restricts their general employment. In this connexion there is a point to which I would draw particular attention. If the reader will turn to the charts, he will find that whilst both codeine and morphine had to be given for a long time, and in large doses before the sugar was reduced to a minimum, the difficulty chiefly consisted in removing the last traces. In Case I., it required twice as much morphine *per diem* to completely remove the sugar from the urine, as it required to reduce it to 167 gr. *per diem*—a comparatively safe excretion. I would suggest that in routine practice we should be satisfied with this degree of success, which would be secured by the administration of an amount of the drug to which no one could reasonably take exception.

And lastly, I would once more indicate that these results refer entirely to the action of certain drugs *plus* rigid dieting. Only in this way —by first establishing a sugar equilibrium by means of proper feeding—could the real action of the drugs be ascertained. How far morphine and codeine can influence diabetes on ordinary diet, or on modified diet, is another question—a question which appears to me highly deserving of further study.

HYPERTENSION OF THE ARTERIES: THERAPEUTIC INDICATIONS.—In angina pectoris, there is exaggerated and permanent arterial tension, and here the beneficial influence of cardio-vascular depressants, such as nitrite of amyl, glonoine, morphine, which open up the capillary sluiceways of the organism, is seen, while digitalis which raises arterial pressure but aggravates the condition.

Permanent hypertension has been supposed by some excellent authorities to belong exclusively to Bright's disease or to that form of the latter known as interstitial nephritis. As the older theory puts it, the heart is overworked, owing to the obstruction in the renal circulation, and hypertrophies; more work is also imposed on the arterio-capillary system, and changes in the arteries and minute vessels take place (increase of muscular tissue, fibroid thickening). This theory was eventually abandoned for what is now known as the "stop-cock theory," which makes both heart and arteries hypertrophied in a constant antagonistic struggle, the heart laboring to force into the tissues blood poisoned by waste elements which the kidneys, being diseased, have failed to eliminate, the arteries contracting preternaturally in the endeavor to shut the blood out of the tissues. A third theory which has had many advocates, notably Mahomed, who defends it in his treatise on "Chronic Bright's Disease without Albuminuria," and other papers, regards certain generalized circulatory changes, a condition known as arterio-capillary fibrosis, as primary, and Bright's disease only as one expression of this alteration of the blood-vessels. Without doubt this is an extreme view; there is too much evidence that in very many instances the renal disease comes first, and the arterial lesions are secondary to blood changes therefrom ensuing. The existence, however, of a general arterio-capillary fibrosis, apart from any renal affection, or at least, anterior to such affection, is very probable, and Huchard presents some weighty considerations in support of his proposition that "arterial hyper-tension is the cause of the arterio sclerosis, preceding for a considerable time the evolution of divers maladies (cardiopathies and arterial nephritis) which are themselves dependent on the vascular sclerosis." The order of facts is this: arterio-capillary spasm, arterial hypertension, arterial sclerosis, visceral sclerosis. Huchard cites instances where the long precedence of the arterial condition seemed clear to him; where for years there were the signs of exaggerated arterial tension (the sphygmographic tracings, the diastolic resonance of the aorta, the dyspnœa of exertion, etc.), then finally all the symptoms of interstitial nephritis manifested themselves. Such cases are often attended with considerable œdema of the lower extremities long before there is a trace of albumen in the urine. Here are witnessed the benefits of an exclusive milk diet, of iodide of sodium, of trinitrine, which often bring down arterial tension from 27-30 to 20, or even below this figure, as is shown by the sphygmomanometer. By such treatment the worst issues are often staved off for years, or kept permanently in abeyance.

The pathogeny of arterial hypertension is to be sought in the state of the heart, of the blood, or of the vessels. As for the influence of the heart, this would seem to be very limited, as, in the writer's estimation, it is doubtful if cardiac hypertrophy ever precedes a condition of arterio-capillary fibrosis.

The quantity and quality of the blood, Huchard thinks, have a restricted but real influence. If the water of the blood is augmented (serous plethora), arterial hypertension must ensue. The quality of the blood has a certain rôle. It is known that saturnism causes arterial hypertension; and this is undoubtedly the case with toxic products generally, which are retained in the blood through failure of the emunctories to eliminate them. But the most efficient cause of hypertension is spasm of the arterioles and capillaries. This may be brought about by various agencies: gout, "which is to the arteries what rheumatism is to the heart;" rheumatism; the influence of tobacco; the abuse of alcoholic stimulants. Heredity has an important predisposing influence. Overwork has undoubtedly an etiological part; and so have mental emotions, which, Huchard says, often determine attacks of vascular spasm, and contribute to produce temporary or permanent hypertension. Huchard finds arterio sclerosis to be especially frequent among members of the medical profession: this he attributes largely to the hurry, anxiety and overwork incident to this profession.

Among the symptoms of hypertension may be mentioned the oppression, the dyspnœa on exertion, palpitations, which are often of a distressing character, local accessions of algidity, of pallor, etc. Broadbent mentions besides, a tendency to somnolence, headache, vertigo, certain neuralgias, in a word, all the morbid incidents peculiar to arterial spasm. Acute dilatation of the heart and aorta often accompany this condition of vascular hypertension; this is revealed by peculiar signs, such as the

diastolic aortic resonance alluded to in the previous paper. At the same time, the precordial shock is increased, giving to the organ the character of the "impulsive heart." The beatings of the arteries are exaggerated, the radial pulse is "strong, vibrating, concentrated, tense," corded, as the old writers called it.

The therapeutic indications are clearly deducible from the foregoing considerations. The heart must be sustained, and the peripheral obstacles, diminished: everything capable of bringing about vaso-constriction and arterial hypertension must be avoided, all medicines, for instance, such as chloral, ergot, lead, belladonna; beverages, such as tea, coffee, alcoholic stimulants; tobacco, excesses of the table, too animalized a diet; finally, excessive or depressing emotions, and overwork of mind or body.

Among medicines, such as are known to be vaso-dilators or depressors, are indicated, such as opium, aconite, trinitine, nitrite of amyl, the iodides. A mixed diet is to be recommended, such as white meats, fresh vegetables and salads, bread and fruits and milk. In some cases of great vascular fulness, abstinence from liquids, the "dry diet" of Chomel is to be advised. The functions of the skin and other emunctories should be promoted, the hours of sleep regulated, and exercise should be just sufficient: in fact, the most effective treatment is the prophylactic.—*Boston Medical and Surgical Journal.*

THE TREATMENT OF MIGRAINE WITH INDIAN HEMP.—About sixteen years since the medical journals contained many short articles and notes on the treatment of migraine. I then, in the columns of the British Medical Journal, advised the use of cannabis indica; and I detailed, in the Practitioner for November, 1872, a series of cases illustrative of the good results which very often follow the careful exhibition of the drug. Immediately after seeing the above named article, Dr. E. C. Seguin, of New York, began to prescribe cannabis indica in sick-headache, and so convinced was he of its power to cure or relieve the disease, that he wrote a pamphlet on the subject.* He was followed in 1880 by Dr. Lothrop, who read a paper before the Buffalo Medical Club, advocating the employment of the drug on the principles laid down in the Practitioner. This paper was subsequently quoted in the Buffalo Medical and Surgical Journal, and about this time other American physicians, including Dr. W. H. Draper and Dr. F. P. Kinnicutt, confirmed the views previously expressed by me.

Towards the close of last year the subject was once more ventilated in the weekly medical press,† and numerous letters showed that, in spite of the successes recorded in England and America, the cannabis indica treatment was not much followed on this side of the Atlantic, and that migraine was too often classed among the opprobria of medicine.

Even in Neale's Digest, "a book from which not much is missing," I can find no reference to cannabis indica in migraine. It cannot therefore be wrong to bring the subject once more before the profession, and, if possible, induce other practitioners to give the treatment a careful trial.

Since 1872 I have often prescribed it, and I have yet to meet with a case in which at least some improvement does not follow the careful and continuous use of the drug. Unfortunately I have not kept notes of any of the cases, and for the following accounts I am indebted to my friend Dr. Watters, of Stonehouse.

Case 1.—A female, aged fifty-three. Has been a martyr to this disease for twenty-five years; the attacks recurring very frequently. It was rare that eight days passed without one. In this case improvement began almost immediately; and the attacks are not only less severe, but are reduced to a month.

Case 2.—Female, aged thirty-five. Had suffered from migraine for twelve years. She did not remember during that time ever being three weeks without an attack, and was ill for three days. Here, too, improvement began very soon after treatment, and in eight weeks she considered herself cured.

Case 3.—Female, aged thirty-seven. This patient has had sick-headache for many years. The attacks came on weekly, and lasted for two days. After a few weeks' treatment she was much better, and has now been months without an attack.

Dr. Watters informs me that he tried Indian hemp in a case of persistent headache following exposure to the rays of the sun, and found that recovery ensued, after bromide of potassium and other drugs had failed. Of course the result here might be merely a coincidence, but the cases of migraine cannot be relegated to the chapter of accidents. It should be noted that the treatment here advocated afresh is not merely a palliative one during the paroxysm, like the use of guarana, caffeine, hypodermic morphine or nitrite of amyl inhalations, but is often curative and nearly always gives some lasting relief. Dr. Seguin, in the pamphlet already mentioned, says: "I think that we may say of cannabis indica for migraine that it is nearly as efficacious as the bromides in epilepsy. Both may cure, both do bring about remarkable interruptions in the series of attacks, both must be employed in the shape of the continued doses." Dr. Seguin adds that cannabis in migraine is less effectual than bromide in epilepsy. Here I am unable to agree with the American physician. My experience in the treatment of epilepsy has not been small, and I have seen many cases of migraine. In reviewing both, I am confident that in my hands recovery has more frequently followed cannabis indica in migraine than bromides in epilepsy. My experience would further lead me to believe that cannabis is more useful in women than in men, probably because migraine in women is often accompanied by some irregularity of the uterine functions, and cannabis has long been credited with some specific action on the uterus.

It is necessary to persevere with the treatment for at least many weeks. Dr. Seguin followed the excellent plan of obtaining from his patients a promise that they would take the medicine for three months. It is, however, usual for improvement to show itself earlier than the expiration of three months; and when decided relief is felt there is not much fear but that perseverence in the treatment will follow the improvement, as migraine is the reverse of

* Trow's Printing Company, New York, 1878

† Dr. Stephen Mackenzie (abstract in Practitioner, xxxviii. p. 294).

a pleasant companion, and often unfits its victim for an active life several days in each month.

The alcoholic extract is the best form of the drug to prescribe, and nothing but the freshly made preparation can be relied on. It is very necessary to insist on this. One-third of a grain made into a pill and taken every night, or every night and morning, is generally sufficient to begin with, and in severe cases the dose may be quickly raised to half a grain or two-thirds.

I have never seen unpleasant symptoms follow this course, except in the case of a patient who foolishly took a double dose before breakfast, and in whom slight but not alarming toxic effects were produced. It seems certain that more than one grain should never be given except to patients habituated to its use, and even in them I would not order so much unless the extract were part of the specimen from which the same patient's last prescription had been made-up. The British Pharmacopœia correctly gives the dose at from a quarter to one grain, while in Christison's Dispensatory it is put from two to five grains, a statement which can only be explained by supposing that the extract was either old or carelessly prepared. Still it would seem not to be generally looked upon as a poison. I see no mention of it in Taylor's book, and Mr. Wynter Blyth passes it by in his admirable work on Poisons.

Unlike opium, no craving for further doses follows its medicinal use, and apparently it can be given up without the slightest effort at any time.—Richard Greene in the *London Practitioner*, July, 1888.

Chloroform as an Anæsthetic. — Dr. Chisholm's recent paper, "A Very Valuable Lesson for Those Who Use Anæsthetics," brings up not only the question of the proper treatment of suspended animation from anæsthetics, but also that of the choice of an anæsthetic agent. Dr. Chisholm estimates that chloroform has been administered under his charge at least ten thousand times, without a death. Four cases of suspended animation have occurred in this series, which were successfully treated by the method of Nélaton—suspension of the patient by the heels. The detailed account of these four cases adds convincing testimony to the value of this plan of treatment. Dr. Marion Sims, in "The Story of My Life," gives a graphic account of a similar successful case in which the treatment was supervised by Nélaton himself; three times were the functions of the heart and lungs restored by suspension, and as often they failed when the supine position was resumed. "It is the horizontal position which is fatal in chloroform poisoning," Dr. Chisholm says, and adds: "I feel convinced, from my own experience with this invaluable method, that many of the dead from chloroform might have been resuscitated had the surgeon hung up immediately by the feet the inanimate body, instead of wasting time in applying hypodermic injections, cold water splashing, spanking, fanning, electricity, or even attempts at artificial respiration. . . . Do any or all of these things if you will, but hang up the patient first, and that instantly, as soon as the heart and lungs fail." The method is equally applicable to the lesser grades of heart-failure, and to the same conditions when brought about by ether.

The method of treating obstructed pharyngeal breathing employed by the author is deserving of especial emphasis because of its practical importance. "Should snoring occur," he says, "indicating some difficulty in pharyngeal breathing, the chin is drawn forcibly upward. This elevation pulls the anterior wall of the pharynx, with the hyoid bone and root of the tongue, forward, making for the air a clear and straight passage from the nose into the lungs. By this movement of the chin, respiration becomes immediately quiet and easy. The pulling up of the chin is a much more efficient means of pulling the root of the tongue forward than by pulling out the tongue with the forceps, as is recommended by some surgeons. It is not always easy at this stage of anæsthesia to get into the mouth, as the lower-jaw muscles may not be relaxed. A proper tongue-forceps is not often at hand, and to tear the tongue substance with sharp-toothed and yet slipping instruments, with the soreness and swelling which subsequently follow, is an abominable practice which should be abolished. The patient's chin and your own hands are always present, and it only needs knowledge of the method to apply it, and to secure prompt and speedy relief."

The belief has been growing stronger of late that ether is not so safe an anæsthetic as has been supposed. Emmet, about 1865, had a death from ether anæsthesia. The woman was suffering from cystitis and pyelo-nephritis. After this death, he established the rule in the Woman's Hospital that the urine of all patients should be examined prior to etherization. He states that he has had five other cases of fatal suppression of urine where this rule was neglected by his assistants. It is a clinical fact which has been long recognized that persons with certain diseases of the urinary organs do not stand operations well. Especially is this true of persons with surgical kidney. They die shortly after operation from anuria with uræmia. It has been supppsed that death is due to shock from the operation; but it is now known that the principle cause is irritation of the kidneys with ether. Reports of serious illness and death from ether-uræmia have not been rare in the last few years. So real is this danger, that some of the most conservative surgeons in America have abandoned ether as an anæsthetic. There is unquestionably a strong reaction against the dictum that ether alone shall be used for the production of anæsthesia in surgical practice, and a desire that the relative indications for the use of chloroform be better defined. While professional opinion is not yet sufficiently crystallized for dogmatic assertion, yet it is quite well established that ether is badly borne at both extremes of life (since it is apt to set up a bronchitis, or to intensify one already present) and by chronic drunkards; and that it is very fatal in cases of fatty heart and of nephritis. Chloroform, on the other hand, is well borne by the young and the old, by pregnant and parturient women; and it is not known to have any irritating effect upon the kidneys. It is almost universally recommended in tracheotomy. Deaths from chloroform generally have been among adults. Deaths have occurred during the administration of chloroform, where

there was reason to believe that fear of the anæsthetic was the cause of the fatal result.

In the present state of our knowledge, the use of chloroform for the production of anæsthesia is justifiable during labor, in persons suffering from acute or chronic disease of the kidneys, in tracheotomy cases, and in the young and old, especially when they are suffering from bronchitis. Ether should not be given to persons suffering from diseased kidneys.—*Med. and Surg. Reporter*, July 21, 1888.

THE CHIAN TURPENTINE TREATMENT OF CANCER.—Chian turpentine, the internal administration of which as a remedy for cancer has been recently recommended anew by Professor John Clay, obstetric surgeon to the Queen's Hospital, Birmingham, England, is a product of the *Pis'acia terebinthus*, a tree which in its native island of Scio, in the Mediterranean, grows to the height of thirty or forty feet. The gum is obtained from incisions into the bark, and the many impurities which it contains is composed of sand, leaves, straw, and particles of the bark and fruit. As Professor Clay insists that its efficiency depends upon the genuineness of the drug, it is well to carefully consider the following description from Flückiger and Hanbury's "Pharmacographia":

"Chian turpentine, as found in commerce and believed to be genuine, is a soft solid, becoming brittle by exposure to the air; viewed in mass it appears opaque and of a dull brown hue. If pressed while warm between two slips of glass, it is seen to be transparent, of a yellowish brown, and much contaminated by various impurities in a state of fine division. It has an agreeable, mild terebinthinous odor, *and very little taste*. The whitish powder with which old Chian turpentine becomes covered shows no trace of crystalline structures when examined under the microscope.

It is believed that Strassburg and Venice turpentine and Canada balsam are often substituted for it, which can usually be detected by applying the tests as to taste, odor, and appearance given above.

The turpentine, as used by Clay in his first reported cases ("Lancet," March 27, 1880), was given in the form of a pill, containing three grains, combined with two grains of flowers of sulphur. Two of these pills were given every four hours for many weeks, and in some cases for nearly a year. It was found that in some instances the turpentine in the pill form was not digested, and the latest recommendation of Professor Clay is to administer it in an emulsion as follows:

One ounce of the Chian turpentine is to be dissolved in two ounces of pure sulphuric ether. This solution has been termed the turpentine essence, and the emulsion is made by adding one ounce of this essence to a mucilage of acacia (one ounce and a half of powdered gum arabic and water to nine ounces), making a ten-ounce mixture, a teaspoonful of which contains about three grains of the drug. A dessertspoonful, it will be observed, contains the same amount of turpentine as the two pills which were previously recommended. In some cases resorcin has been added in doses of a grain. This emulsion is not of a disagreeable taste, as nearly all my patients who are under the treatment testify.

Tonics have been used when indicated. In some instances local applications have been made, in others this internal remedy alone has been employed. When it has been taken for about three months it should be omitted three days in every fortnight. The sulphur is often given in a separate pill, especially in cancer of the uterus and rectum. I have given this description of the plan and exhibited the preparations in order that we may have an accurate knowledge of what this Chian turpentine really is.

We are all familiar with the statements which Professor Clay has repeatedly made concerning its efficacy. He has seen a number of complete cures, not only of uterine cancer in advanced stages, but also of cancer of the rectum and surface epitheliomata. In cancer of the breast he reports marked improvement of symptoms and complete arrest of the new growth.

No report has yet been published, as far as I can learn, stating the precise changes in the tumor, but he maintains that the primary action is upon the periphery of the growth. The plan has been tested in the London Cancer Hospital, and, after a tolerably thorough trial, condemned by Dr. Marsden and Mr. Purcell. Another trial has recently been made, however, and one of the surgeons of the same hospital declares the Chian turpentine to be a very useful remedy in many cases.

In the "Lancet" for November 22, 1887, the editor says there can be no doubt that Professor Clay's reports of cures are trustworthy, and that it can hardly be possible, with a man of his large experience, that they were *all* cases of mistaken diagnosis. He advises a continued trial of the remedy.

The drift of pathological research is now strong in the direction of a specific origin of the disease, to which theory Sir. James Paget expressed a qualified preference in his recent "Morton Lecture."

To cure by internal treatment may, in the next decade, become as possible in cancer cases as it has long since become in syphilis.

My own experience is still too limited to be of much value. Several patients in my service at the Skin and Cancer Hospital have been under the treatment for varying periods—from one to six and eight months. All take the remedy well, by giving them a brief rest occasionally. A cancer of the uterus has been greatly benefited; pain has decreased, hæmorrhage has ceased, and granulations have become healthy.

A large epithelioma of the face has decidedly changed in character. In some no effect whatever has yet been noted. We shall watch the cases with great interest, and give a full report to the profession.—DANIEL LEWIS, M. D., in *N. Y. Med. Jnl.*

ANTIPYRINE VS. ANTIFEBRINE.—Since the discovery of antipyrine and antifebrine, quinine has been placed on the "retired list" of antipyretics, and it is now almost impossible to pick up any medical journal without finding in it numerous references to one or the other of the drugs. I have never yet seen the merits of the two compared; in fact, antifebrine is almost invariably passed over to give in my opinion

at least, undue prominence to antipyrine. During the past year I have used both drugs quite extensively, and can unhesitatingly say that antifebrine is decidedly the safer and more efficacious of the two. At the outset I used antipyrine exclusively, but it proved such an uncertain and unreliable agent in my hands, and in a number of cases caused such unpleasant and alarming symptoms, that I abandoned its use entirely in favor of antifebrine. I have been prescribing the latter almost every day during the past eight months, and have yet to find the first untoward symptom following its use. The dose is smaller than that of antipyrine, and although its antipyretic effect is not so soon obtained, it continues for a much longer time, and *is not followed by prostration.* I have had most alarming collapse follow in several cases the administration of a single dose of antipyrine, but nothing of the kind has ever followed the use of antifebrine. In typhoid fever it is of inestimable value, and I have invariably found the greatest possible amelioration of all unfavorable symptoms immediately follow its use: the temperature is reduced from 2 to 2½ or 3 per cent.; the pulse lessened in frequency and fulness, headache diminished, diarrhea improved, kidneys act better, and the skin, instead of being hot and dry, is moist and comparatively cool. Since November, 1887, I have had thirty-eight cases of typhoid fever, three or four being extremely bad, without a single death, and I can confidently assert that in every case the condition of the patient was much improved by the use of antifebrine. I find nothing so promptly and effectually relieves the obstinate and distressing vomiting so frequently present in remittent fever as antifebrine in five-grain doses. I have used it with good effect in a number of cases of migraine and facial neuralgia, and in a case of epilepsy in a girl of eighteen, which had withstood all the usual remedies and brought me almost to the verge of despair. It worked wonders, controlling the paroxysms as nothing else had done. In this case I have continued its use for some time, giving five grains three times a day, and the paroxysms came on every afternoon, and continued, almost without intermission, until the following morning; but it is now two months since the last attack, and my patient is rapidly gaining in health and strength, and feels better than for many months. I have also used antifebrine in the vomiting of pregnancy in several cases, but not, I must say, with any marked benefit except in one case, in which the vomiting was completely controlled by the first dose. In a case of measles recently under my care, in which the symptoms were really quite alarming, it acted to perfection. I was not sent for until the patient, male, aged thirty-four, had become seriously ill, and I found him with a temperature of 106⅘°, pulse 140, wildly delirious, requiring to be forcibly held in bed, and his whole body covered with the eruption. I ordered antifebrine, gr. v, at once, to be repeated in an hour, and after that every two hours until six doses had been taken. I saw him again about five hours after the first dose had been given, and found a very decided improvement in the symptoms: the temperature had fallen to 102⅘°, pulse to 106, the patient resting quietly and perspiring freely. He improved rapidly from that time, and in a few days was convalescent. This, of course, is but an individual opinion as to the relative therapeutic value of the two drugs, and my only object in writing the paper is to pay a tribute which I consider to be justly due to that much-slighted but highly-useful drug, antifebrine. Is it to be wondered at that, under the circumstances, I pin my faith to it as an antipyretic in preference to antipyrine.—JAMES A. FRASER, M. D., Milestown, Md., in *Med. Register*, July 21, '88.

THE LOCAL APPLICATION OF CAMPHORIC ACID.—At a meeting of the Berlin Medical Association, reported in the Deutsche med. Zeitung, No. 50, 1888, Dr. Fürbringer did not take so favorable a view of the healing properties of camphoric acid as Dr. Reichert had done; yet he believed that for certain indications the drug would come into general use. He had tested the antiseptic and antipyretic properties of the drug as compared with other vegetable acids, such as salicylic, cinnamonic and benzoic acid. These are all very closely related. On this occasion he was able for the first time to prove that salicylic acid may have an antiseptic effect. Comparisons with camphoric acid were unfavorable to the latter, in so far as it causes but a very slight reduction of temperature, and is, as an antiseptic, far behind any of the other acids As to its solubility, only .5 or .6 per cent. can be obtained at a temperature of 10° C. One great disadvantage that it has in common with the above-named vegetable acids is that in the same degree as it becomes alkaline camphorate it loses its antiseptic value, in spite of its greater solubility. In alkaline solutions, therefore, no reliance can be placed in camphoric acid. Fürbringer's further more clinical examinations relate chiefly to the treatment of cystitis, especially when accompanied with ammoniacal fermentation. In about 50 per cent. of from 30 to 35 cases he met with an undoubted effect, not, however, on the pus-forming catarrh, but on the decomposition of the urine. The effect became more evident when solutions in water, and particularly supersaturated solutions or emulsions of the drug (two per cent.) were thrown into the bladder.

The irritant effect of camphoric acid is very slight; hence its value in removing uric acid fermentation. But salicylic acid gives the results. Fürbringer has never observed any anti-catarrhal effect of camphoric acid, and has no faith in its lauded effect in sore-throat, acne, etc. The benign character of the disease may lead to the mistake. How such mistakes occur is proved by the following case. A doctor asserted at the time when the sublimate treatment was at its height of popularity, that he had observed the most remarkable effect in the latter drug in the most diverse cases of catarrh. Fürbringer happened to examine one of these solutions, and to his astonishment could not discover a trace of sublimate. The doctor had, it appeared, used spring-water, so that all the sublimate had been eliminated in the form of insoluble tetroxyde. Yet for months the sublimate had been credited with the favorable termination of sore-throat cases. Fürbringer also tried camphoric acid in some typhoid cases, supposing that the contents of the intestines would be thereby defected. But though certainly a large number of bacteria were destroyed in the intestines, neither the

typical course nor the fever was influenced by the camphoric acid. He increased the dose from a few centigrammes gradually, and proved that patients could take 3 grammes, nay, even 5 to 6 grammes daily. He never could find any effect on the tubercular processes, but in 50 per cent. of phthisis cases the night-sweating was stopped by the drug, the effect being always prompt. One gramme may be given three or four times a day, or 2 grammes in the evening. In short, camphoric acid, in Fürbringer's opinion, is a pleasant, non-poisonous antiseptic, which causes no irritation. It possesses no specific action apart from the favorable effect in the night-sweatings of phthisic patients, and it is cheap.

Dr. Reichert denied that the acid could be neutralized by the small quantity of mucus, as he gave the medicine in large doses. He was convinced that he had not been mistaken as to the effects of camphoric acid. He had treated himself again and again with camphoric acid for frequent attacks of sore-throat, and had always been relieved. If catarrh of the larynx is more quickly cured by camphoric acid, and if the latter is considerably more agreeable in its application than other astringents, while causing rapid shrinking of the tissue, then there can be no doubt as to the value of the drug. A specific action in tuberculosis is proved by the observations of Sormani and Bognatelli.

TREATMENT OF HEAT FEVER.—The principles upon which a case of heat fever should be treated have been practically settled since the publication of DR. H. C. WOOD'S researches on the subject. It is of decided advantage, however, for the practitioner, besides knowing these principles of treatment, to have an efficient and simple method of applying them. Such a method has been described by DR. F. A. PACKARD, in his report of thirty-one cases of heat fever seen by him while resident physician at the Pennsylvania Hospital, during the summer of 1887 (American Journal of the Medical Sciences, June, 1888). In every summer a large number of cases of heat fever are brought to the Pennsylvania Hospital, and the treatment adopted there is the result of years of experience. During the time of DR. PACKARD'S experience, as soon as a patient with heat stroke was brought to the hospital, he was placed on a waterproof fracture-bed (which was kept under a tent in the open air), his clothing was removed as quickly as possible, a thermometer was introduced into the rectum, and ice was packed about the body and extremities. As a rule, fifteen or twenty minims of tincture of digitalis were administered hypodermically. The thermometer was removed and examined every seven minutes, the icing being continued until the temperature fell to 104° F. The patient was then dried and put on a clean bed with an ice-cap applied to his head. The icing was not continued after the temperature in the rectum had fallen below 104° F., because it showed that if continued after that time the fall in temperature was too rapid and great, and a condition was brought about which required the application of external heat and free stimulation.

In cases in which the initial temperature was only 106° F. or under, it was found sufficient to strip the patient and sponge him liberally with a mixture of one part of alcohol and four parts of iced water, applying at the same time an ice-cap to his head. In addition to this routine treatment, other means were employed to meet individual symptoms in various cases. Thus, when convulsions occurred after the temperature had been lowered to a considerable extent, morphia was administered, and usually with good effect. Again when the respiration and pulse failed to improve in character with the fall in temperature, the patient was bled in spite of the feeble pulse. This almost invariably produced quieter, fuller respirations, with a soft steady pulse. It was generally necessary to bleed from the arm, the blood being so thick that it had to be squeezed out by stroking the arm up from the hand. The loss of twelve or sixteen fluidounces of blood sufficed to bring marked improvement.

From the experience in the Pennsylvania Hospital, the essential points in the treatment of heat-stroke may be summarized as follows: Put the patient in the shade, where there can be as free a circulation of air as possible; strip him, and, if the temperature is above 106.2°, apply ice to the body until the temperature falls to 104°; then dry the patient and put him to bed with an ice-cap to his head. If convulsions occur at this time, use morphia; if the circulation and respiration do not improve with the fall in temperature, bleeding may be employed.

In addition to these practical and easily-remembered rules for the treatment of heat fever, we would remind our readers of a suggestion made by DR. MORRIS J. LEWIS in the Medical and Surgical Reporter, August 6, 1887, that the physician would do well to carry with him a watery solution of antipyrine, two drachms to half an ounce, and administer at once twenty minims (ten grains) hypodermically, in order to bring about an early fall in temperature before other means can well be effective.—*Med. and Surg. Reporter* July 21, '88.

THE MICROBE OF ACUTE ARTICULAR RHEUMATISM.—In a short preliminary note in the Meditzinskia Pribavlenia k'Morskomu Sborniku, November, 1887, p. 401, Dr. J. P. Popoff, senior house-physician to the Marine Hospital in Nicolaev, states that after prolonged and laborious researches he has succeeded at last in discovering and isolating the pathogenic microbe of acute articular rheumatism. Having obtained, with all sterilizing precautions, a drop of blood from the finger of a febrile rheumatic patient, the writer introduced it into a test-tube with meat-peptone bouillon kept at an ordinary room temperature (18° or 20° R.) By the end of ten days there was found a superficial growth in the shape of "islets of a bright lemon-yellow color." "Similar citrine patches, having the consistency of a somewhat thin jelly, were obtained also on the potato-slice." Under the microscope "the patches proved to consist of motionless cocci, partly isolated, partly forming rows or chains." The cocci were "smaller than those of Nessler, but larger than those of erysipelas." They took in Weigert's gentian violet. The identical microorganisms were also detected by Dr. Popoff at the *post-mortem* examination of a rheumatic

subject in the synovial fluid from inflamed joints and in the heart." An injection of the cultures into the external jugular vein in two rabbits "gave rise to acute articular rheumatism with pericarditis and endocarditis." In both of the animals (subsequently killed) the synovial fluid, and "sections from the heart" were found to contain the same micrococci. The staining procedure is given thus: "Specimens are placed into Weigert's solution for half an hour, and are gently heated every five minutes. Sections from the tissues (heart) are kept in the solution for twenty-four hours. After washing out with distilled water they are put for five minutes into Gram's iodine solution, then into alcohol, and, after drying, are mounted in Canada balsam. The tissue specimens should be kept, in addition, before mounting, in clove-oil." The incompleteness of this "preliminary communication is too obvious to be dwelt upon, and too considerable to call forth any "preliminary" criticism in regard to the essence of the matter. No drawings are presented. Dr. Popoff does not mention whether he is acquainted with Dr. Alfred Mantle's researches concerning the bacteriology of acute rheumatism, published in the British Medical Journal, June 25, 1887, p. 1381.

DUJARDIN-BEAUMETZ ON ÆROPATHY.—After a historical resumé of the discovery and therapeutical applications of compressed air, the author describes the various models at present in use, for the most part cumbersome and expensive. The principal effects of a series of baths of compressed air, at a pressure of two-fifths of an atmosphere (the strength usually employed), is a decrease in the number and an increase in the amplitude of respirations. According to Von Vivenot, this amounts to about 3·3 per cent., and may last several months. One hundred and twenty-two baths in 143 days gave an increase of pulmonary capacity equal to 25 per cent. The pulse undergoes a somewhat similar decrease. According to Georges Liebig, the consumption of oxygen increased 6 per cent. while breathing compressed air, a larger quantity of carbonic acid being excreted at the same time. There is a tendency to lose weight, but the effect of the baths on the appetite and nutrition generally is such as to more than overcome and outweigh it. Its therapeutical effects consist then, first of all, in an augmentation of the pulmonary capacity, and it affords great relief in all cases of dyspnœa, and particularly in asthmatic dyspnœa with rapid shallow respiration. It is of no avail in the so called essential asthma, nor in that due to affections of the nasal mucous membrane; but in the emphysema which results from asthma of nervous origin and from chronic bronchitis it is of signal service. It manifests an indisputable curative action on the graver cases of whooping-cough, although no explanation of the effects is forthcoming. In no class of cases is the expanding effect of the compressed air bath more marked than in cases of pleuritic adhesions consecutive to pleurisy, where the lung is bound down and inflation mechanically prevented. By augmenting the diameters of the chest, malformations are remedied and the inteference with respiration overcome. In pulmonary tuberculosis the method is more prophylactic than curative. In chlorosis the increased oxygenization of the blood and improved nutrition materially hasten recovery. For similar reasons it has a beneficial effect in albuminuria and diabetes.—*London Medical Recorder.*

INFANTILE ECZEMA.—DR. J. W. SHOEMAKER divides the causes of this common complaint into four—insufficient or improper food, imperfect assimilation, deficient excretion, and external irritation. The first cause may affect even children who have nothing but the breast milk if this be of poor quality or scanty, or if it be otherwise altered by emotions, pregnancy, menstruation, or disease. The source of external irritation may be flannel or other woollen clothing, dyed clothes, wet diapers, light clothing, or the excessive use of soap and water. The first step in treatment is to remove the cause. The best substitute for human milk is 'pure undiluted cow's milk unmixed with any substance whatever.' Wasted eczematous infants will rapidly gain flesh and acquire a healthy skin under this dietetic treatment alone. Cases due to malassimilation and imperfect digestion, will be benefited by pepsine. The remainder of the treatment has reference to the causative agency, but arsenic, in the author's opinion, is always unnecessary and frequently injurious.—*London Med. Record*, 7, 20, '88.

THE TREATMENT OF CHRONIC DIARRHŒA BY TALC.—The means at present employed in the treatment of chronic diarrhœas are as inadequate as they are numerous. Dr. Debove administered talc, in an impalpable powder, as being inert and not liable to undergo changes in contact with the intestinal secretions. He has given it in doses of seven to twenty ounces daily mixed with milk. In cases of diarrhœa due to tuberculous lesions of the intestines the treatment was uniformly successful, the diarrhœa being followed by an obstinate constipation. Curiously enough, he found that while giving the powdered talc patients tolerated substances which before they had been quite unable to retain. Milk, for example, which invariably gave rise to drastic purging, was given without setting up any disagreeable feelings. He has even been able to give a pound of oil in the twenty-four hours, and thus materially contribute to the nutrition of the patient. So far he has not tried the remedy in the diarrhœa of hot climates nor in children.

ANTIPYRINE AS AN AGALACTIC.—Dr. Salemi, being called to a young robust woman, recently delivered of her first child, found it necessary to arrest the secretion of milk in consequence of the condition of the breasts. During ten days he tried all the usual means—purgatives, diet, iodide of potassium, etc.—without effect. He then resorted to antipyrine, of which he gave ten grains daily in three doses. The secretion diminished on the first day, and definitively disappeared on the third.

The Medical Age.

Vol. VI. DETROIT, AUGUST 25, 1888. No. 16.

Original Articles.

ON THE USE OF ELECTRICAL TERMS AND EXPRESSIONS.

BY W. J. HERDMAN, M. D., ANN ARBOR, MICH.

It is very gratifying to one who has firm confidence, as I have, in the therapeutical value of electricity, to observe an increasing desire among the members of the profession to get more definite information regarding the laws which govern its action.

One of the first essentials to attaining this end, is a clear conception of the meaning of the technical terms ordinarily employed by electricians, and which may be regarded as the A B C's of the sciences.

A correct understanding of the significance of these terms by all who have occasion to use them, together with the employment of uniform expressions in describing electrical phenomena, will greatly advance our knowledge with reference to the proper range of application of this valuable agent.

We are already indebted to the French for much of the best work, both industrial and therapeutical, relating to electricity, and it is in a French work, recently published, upon electro-therapeutics, that I have seen the best explanation of the meaning of the technical expressions and values of the electrical units. The work to which I refer is that of M. Boudet, de Paris, upon Eléctricité Médicale, from which I will venture to make a few extracts :

"The different forms of *energy* commonly called *forces* (heat, light, chemical affinity, etc.) may undergo a transformation into *electricity*. One of these transformations most used in medical practice and physiological experiment, is that which results from the action of acidulated water upon zinc.

By reason of that chemical action the acidulated water and the zinc assume a new electrical condition different for each of these two bodies, that is, each has a different *potential*. This difference in the potentiality of zinc and acidulated water is generally termed *tension* or *electro-motor force*, though these two expressions are not exactly synonymous. To quote from Dr. Bardet: 'We call that force *electro-motor* which contends against a return to the state of equilibrium in the electrified bodies.' '*Tension* is the more or less *energy* with which electricity tends to depart from its source; it depends upon the energy of the electro-motor force.'"

With regard to the *potential* a definition is much more difficult to formulate; the following is the one given by M. R. Pictet: The *potential* of a body is the amount of force accumulated in this body. According to Dr. Gariel, two bodies are of the same *potential* when united by a fine wire conductor, there is no change in their electrical condition, but if a change is occasioned by such a connection they are of different *potentials*, and accordingly, that which gives up a portion of its electricity is said to have had a *greater potential* than that which receives it. Electrical equilibrium is determined neither by the *quantity* of electricity nor by the tension. These electric phenomena are similar to those of hydraulics: in the case of two reservoirs full of liquid and connected by a pipe which reaches to the bottom of each of them, the equilibrium in these two reservoirs depends neither upon the *quantity* of liquid they contain nor the *pressure* upon the bottom of the basins; the equilibrium exists or not according as the *levels* are or are not on the same horizontal plane. The height of *level* is analogous to the *potential*. The *potential* may then be called the *electric level*.

Thus in a Daniell's battery the zinc is acted upon by sulphuric acid, sulphate of zinc is formed and an equivalent of hydrogen is set free and goes to reduce the sulphate of copper. Now in this case there exists in the contact of the zinc and the acid, an electro-motor force of which the value would be measured by the difference of the observed potential. We must add that the electro-motor force is independent of the surface of the metal acted upon and of the volume of acidulated water; it depends upon the nature of that metal and the degree of concentration of the liquid.

The *unit of electro-motor force* is called a *volt* (from the name of Volta). Practically a volt corresponds very nearly to the electro, motor force of a Daniell's cell; a Lèclanché is a little more, being 1 volt .45; a Bunsen cell, 1 volt .96; a Gaiffe cell, of chloride of silver, 0 volt .915; a Genet cell, 2 volts .02.

The *unit of intensity* is called an *ampere*. An ampere represents the quantity of electricity which, created by the electro-motor force of a volt, traverses in a unit of time, a second, a

conductor having the unit of resistance,—an *ohm*. When we are using electricity for medical purposes that unit is far too high, and we generally reckon by *milliamperes*, or the thousandths of an ampere. In physiology the intensity of the currents employed is generally very weak, and the estimation should often be made in the sub-multiples of the milliampere.

According to the preceding definition, we see that the total quantity of electricity emitted by an electro-motor (battery or machine), and sent through any organ, nerve, or muscle, is estimated by multiplying the intensity of the current by the number of seconds during which it was applied.

The *unit of quantity* which is used for that valuation is called a *Coulomb*. A coulomb represents, then, the *quantity of electricity generated by a current of one ampere during one second of time;* thus for a current of 10 milliamperes applied for three minutes (180 seconds) the total quantity of electricity supplied by the battery would be equal to 1 coulomb .8.

But in order to estimate the *intensity* and, consequently, the *quantity*, it is necessary to know the *interior resistance of the battery* and the *exterior resistance of the circuit* including the organ traversed.

Now, the resistance offered by any conductor to the passage of a current, varies with the nature of that conductor; that is, it is dependent upon its conductibility, and, moreover, it is directly proportional to the length of the conductor and inversely proportional to its diameter: consequently a battery is as much less resistant as the active immersed surfaces are greater or more closely connected; and, with equal length, a nerve is more resistant than a muscle, because nerve tissue is not as good a conductor as muscular tissue, and also because the diameter is less.

The *unit of resistance* is called an *Ohm*. An ohm nearly equals the resistance which an electrical current meets with in its passage through 100 metres of galvanized iron telegraph-wire of 4 millimetres in diameter, or in passing through a column of mercury 1 millimetre in diameter and 105 centimetres high.

In physiological research it is very important to take into account the *diameter* and *material* of the electrodes which bring the current into contact with the organ experimented upon. Indeed, the degree of excitability, especially in the case of sensory nerves, should not be referred wholly to the *intensity* of the exciting current, for it is due also in part to the *density* of the current at the points of application. Now, the *density* of a current, considered at the different points of the circuit, is in *inverse ratio to the surface of a transverse section of the current at these divers points;* so that it may often occur that the current excites a nerve strongly, a little, or not at all, according as the electrode has a small or broad surface.

Condensers charged from a galvanic battery have not as yet come into general use; they possess however certain very important advantages. Sheets of tin-foil separated by plates of mica or by leaves of paraffined paper are united in two series in such a manner as to form two armatures, arranged one within the other but without any communication between them. By putting these two armatures in connection with the poles of a galvanic battery, there is communicated to them a certain charge the energy of which is in proportion to the surface of condensation and the electro-motor force of the battery. If now we connect these armatures to electrodes placed upon a nerve or muscle, we send into that organ a discharge which sets in motion its proper excitability.

A discharge of this character is measured by means of the *unit of capacity, the Farad* (named from FARADAY), or rather its diminutive the *micro-farad*. The *farad is the capacity of a condenser which contains an ampere at the potential of a volt.* This unit is entirely theoretical, for, in order to represent it experimentally it would be necessary to construct a condenser composed of several million square metres of tin-foil. The *micro-farad* which we ordinarily employ and which is the one-thousandth part of a farad, may be represented by a condenser containing nearly 300 circular sheets of tin-foil separated by sheets of mica and enclosed in a box 8 centimetres in height and 16 centimetres in diameter. Condensers may be constructed guaged in multiples and sub-multiples of the micro-farad, and it is easy by varying the electro-motor force of the storage battery to obtain a variety of excitations of a value accurately determined."

It is to be hoped that all who henceforth make use of electricity as a therapeutical agent will keep careful records of the strength and character of the current required to produce the results claimed in any given case.

The practical difficulties that formerly beset the practitioner in his attempts to make use of electricity as a curative agent, have in the improved methods of its application been largely overcome. The batteries now obtainable are more efficient and durable, and every important village has its electrical expert who is competent to keep them in repair.

The currents generated for illuminating and industrial purposes can be utilized by the physician in his office and thus do away with the care and attention which private batteries demand, while at the same time they furnish him with an unlimited range of power which by a properly constructed rheostat may be graduated to his needs.

ON CHLORAL AS AN ANESTHETIC DURING LABOR.

BY A. F. WATKINS, M. D., POTOSI, MO.

There are few subjects of greater practical interest to the accoucheur than the means for lessening the sufferings of parturition. Among the chief of these is. unquestionably, chloroform, which, besides having passed into almost universal use, possesses powers which, if properly controlled, are invaluable. Yet I am impelled to say that so far as my experience with it increases, my estimate of its usefulness in labor is diminished. Nor does this arise from chloroform doing too little, but because of its doing too much. I am free to allow, withal, that when given with judgment, during pains only, and then not until these have become strong and forcing, and never to full anesthesia, the action of chloroform is admirable, soothing suffering and in no wise retarding labor. On the other hand, labors are often encountered where both the force and frequency of uterine contractions are unmistakably diminished under its influence. It has clearly been my experience repeatedly, to observe that chloroform lessened the strength of the pains, and in so far lengthened the duration of labor. Not infrequently I, in common with many other observers, have witnessed pains which, before chloroform was administered, were active and efficient, become weak and feeble during its inhalation, and grow strong again when chloroform was withheld. I am equally sure also, that the continuous use of chloroform in labor, predisposes to post partum hemorrhage, owing to that general relaxation of the system which ensues, and which we know is often prolonged in the uterine fibers, long after the child is expelled. Yet with these and other drawbacks, which I will not now stop to enumerate, I would by no means unqualifiedly condemn the use of chloroform in labor, but on the other hand allow that in its time and place, and with the really indispensable precautions, it is an agent which often cannot be dispensed with by the accoucheur.

Chloral hydrate, however, is, under certain conditions of parturition, a much more serviceable agent than chloroform, and one whose claims have not, I think, been as fully recognized by the profession as they should be. Among others, chloral possesses the immense advantage over chloroform in that it seems to diminish neither the strength nor duration of the pains, while it materially lessens the attendant suffering. Another quality possessed by chloral, and which gives it additional value, is that it is suited to a period of labor when chloroform would not be thought of, viz: toward the end of the first stage, before complete dilatation of the os, and when the sharp, grinding pains cause more suffering and are less easily borne than the expulsive efforts of the latter stage.

There is a type of labor, very common in women of highly-developed nervous organization, such as are met with among the wealthier classes, where I have found chloral especially valuable. In these cases previous to the rupture of the membranes and the complete dilatation of the os, the pains, though very severe, are short and ineffectual, limited chiefly to the back, and producing little or no impression on on the os, causing hours of intense but fruitless suffering. Here the common and very useful practice is to administer a full opiate, in order to produce sleep, after which the labor usually recommences with new vigor and effect. The disadvantage of the anodyne, however, is that during its action labor is practically suspended and much time is thereby lost. Chloral is, however, not open to this objection, and when given at this juncture the same refreshing sleep or rest will probably be obtained, while the progress of the labor itself will not be interfered with. The uterus will continue to contract, but the contractions will generally be observed to alter and become steady and effective. Another condition frequently associated with that just described, is rigidity and spasm of the cervix. In this class of cases the cervix is generally thin and rigid, with a sharp edge. Soon after the exhibition of chloral these tissues seem to relax, and I have frequently observed a thin os, which after having remained unchanged for several hours, would quickly soften and dilate under the influence of the drug, far more rapidly, I have thought, than it would have done had chloroform been given instead.

Although chloral is, perhaps, more immediately useful in the foregoing class of cases, which are justly included among abnormal labors, it may be given very generally and with great advantage in natural labors, for the single purpose of lessening the suffering of the patient. When given under the condition I have named the patient quickly falls into a drowsy state, not fully of sleep, but approaching it. As a pain begins she generally rouses up, but suffers comparatively little. Multiparæ, who remember former labors, bear strong witness to the immense relief obtained from chloral in most of my labor cases for the past 15 years, and, I have reason to think, without a single bad result. I have carefully watched the uterine contractions, and I am persuaded that it exercises no influence whatever either on their frequency or force. The dose of chloral I am in the habit of giving, is fifteen grains. This is somewhat less than is usually prescribed, but I have generally found it fully large enough. I repeat it at the end of the first twenty minutes, unless it manifests some effect. The second dose is almost invari-

ably followed by comfort, which is often prolonged for an hour or more. If a third dose be called for, as it will be in some cases at the end of an hour or more, a half dose will usually suffice. It is seldom necessary to give more than this, and I have never given beyond a drachm of chloral during a labor. By lessening the quantity after the second dose, and increasing the intervals between the administrations, all needed effect can usually be obtained.

STIGMATA MAIDIS.

BY L. B. ANDERSON, M. D., NORFOLK, VA.

I propose to make no new disclosures in regard to the physiological action of corn-silk extract, in diseases of the kidneys and bladder, but, while cordially endorsing what is claimed for it as a soothing, demulcent diuretic, to state a few facts which have come to my knowledge, in regard to certain anomalous effects produced by certain preparations of this drug.

The writer has been using corn-silk in certain catarrhal conditions of the urinary passages for several years. About two years ago he was called to see a medical friend, far out in the country, who had suffered for more than a year with a muco-sanguino-purulent discharge from the urethra, accompanied with acute pain, extreme soreness, and distressingly painful contractions of the bladder. Accompanying those symptoms, he experienced a most uncomfortable weight, and pulsation in the region of the kidneys. He had consulted half a dozen physicians, all of whom pronounced his a case of Bright's disease. An analysis of the urine, chemical and microscopical, enabled me to diagnose inflammation and suppuration of the trigonum, and neck of the bladder, and the prostate gland. I assured him that the kidney trouble was almost exclusively sympathetic, and that he had no Bright's disease.

He was put on a mixture of stigmata maidis, kava-kava, and spts. ether nitrosi, internally, and anodyne liniments and warm fomentations externally, confining him to milk and bread diet, and demulcent drinks. His improvement was prompt and continuous, and within three months he resumed the duties of his profession. During the time, however, there was some modification of the original prescription, but the same agents were continuously used. When the doctor had sufficiently recovered to visit the city, he requested me to give him a copy of the formula, as he wished to procure the medicine from a special friend of his, instead of the druggist to whom I had directed him to send it. I did so. He procured the article and commenced using it, but it produced such a peculiar dizzy, drunken, bewildered state of his head and mind, that he was compelled to stop it. He attributed the effect to the kava-kava. He procured another supply, leaving out the kava-kava, from the first-named druggist, and the effects were very pleasant. He, therefore, was assured that the bad effect was due to the kava-kava.

Some time after this I made a similar prescription to the foregoing for a lady, and directed the formula to be sent to a druggist from whom I had always procured preparations of the more recent fluid extracts, of a quality which had never disappointed me. A mistake was made, and the medicine was obtained from another party. The effects on the head and senses were similar to those described by my medical friend. I went to the druggist's, examined the formula and found it all right. Examined his medicine, and found he had no preparation of kava kava, and hence had procured it from the druggist to whom the formula was directed to be sent. I could not solve the difficulty, but supposed it might be the effect of the kava, as supposed by my medical friend. I diluted the preparation one-half, and still the patient was so affected by it that she was compelled to stop it. I then carried the original formula to my druggist, had it prepared and sent, and in a day or two called, and learned that no unpleasant effect had been experienced at all. I then suspected that the stigmata maidis was at fault.

Some time in the spring I had occasion to use the same formula, and as the party for whom it was prescribed did not patronize druggist No. 1, I took special pains to write "stigmata maidis (P., D. & Co.)." The medicine procured was immediately used, with the same bad effect above described. I went to the druggist, called for his F. E stigmata maidis, and found it was put up by another party than "P., D. & Co.," and the druggist attempted to justify himself by saying, "this is the best pharmacist in the United States." I made one omission in describing the last recipe—that has no kava kava in it.

The F. E. of corn silk, in both instances, wherein the effect was so unbearable, was made by different pharmacists. It was very dark, thick, and had the odor of belladonna or other narcotic extracts. That procured by the druggist No. 1 (Mr. J. J. Morris, 186 Church street, Norfolk, Va.), of P., D. & Co. was of a rich wine color, and had in a marked degree the odor of the fresh corn-silk, as it hangs in beautiful drapery from the ear after a warm summer's rain.

I can make no explanation of this discrepancy in the effect of agents made of the same material. I *conjecture* that in the one instance the extract is derived from the fresh, undried article, and hence contains its properties unimpaired and uncontaminated, while in the other the crude article is boiled in a damp state, partial decomposition follows, and the organic

alkaloids thus generated impart the deleterious properties complained of.

PICHI IN CYSTITIS.

BY J. W. SOUTHWORTH, M. D., ROCHESTER, N. Y.

G. H., aged 38, laborer, married, got acute cystitis by extension of catarrhal inflammation involving the entire urethral tract. The latter resulted, possibly, from exposure to the cold night air in March while in night-clothes, geting up out of warm bed and going to out-house while perspiring. Never had gonorrhœa or any other venereal affection. Since March 9th had dysuria, associated with hematuria and blood-stained mucous deposit to the extent of a half ounce to an ounce or more during the entire day. Urinated from six to ten times during day-time and several during night. Urine was yellowish-red with lithates; reaction acid and sufficient in quantity; contained also muco-pus from the urethral canal.

All the above symptoms were almost entirely relieved during the remainder of the month by the use of the following medication, with rest in bed two weeks, viz.: 3 to 5-gr. doses of benzoic acid with ½ gr. opii every three or four hours, associated with three teacupfuls daily of infus. of buchu and uva ursi, containing half to a teaspoonful of bicarb. soda in each. Also suppos. (rectal) of morph. sulph. gr. ¼, and atropia sulph. gr. $\frac{1}{150}$ were used, two or three each day, using half of a suppos. when better. On 1st of April all this medication by the mouth was discontinued, and half of suppos. was continued per rectum, and the patient was put on teaspoonful doses of *pichi* three times a day (in milk) after meals. He was not allowed to go out of the house, nor to change diet. April 6th, after taking 2 ozs. of pichi, he was wonderfully improved in appetite and in strength. Excessive coating of tongue much diminished, with a lessened number of calls to pass urine, and less febrile symptoms, etc. The urethral discharge which had been practically absent now returned, with a slight burning at a point 1½ inches from the meatus. Could retain urine six to seven hours without difficulty, and when the desire came could hold back until second call. April 11th, digestive functions in fine condition; good appetite; stronger; has better color; can sleep all night. No nocturnal febrile action. Urethral discharge less and less. Very slight burning on passing water at same point in urethra. Urine almost normal in color. No mucous or other sediment except what would be referable to the urethral discharge. Can hold water one-half a day. Went out into the street for the first time since March 9th. We stopped using suppos. of atropia and morph. and continued with the pichi and also gave him a weak urethral injection of sulpho-carbol. of zinc, three times a day.

April 14th.—Patient reported at office with slight discharge from urethra. Urine natural in color and quantity. No mucous deposit, digestive function and appetite in first-class condition. Slight burning on passing urine in morning. Sleeps good; continued pichi, etc.

April 18th.—General health in excellent shape. Burning on passing water worse or no better; discharge continues. Made examination per rectum, found no tenderness in prostatic region; no enlargement. Lessened medicine to one and one-half to two teaspoonsful during entire day.

April 22nd.—Patient has now taken twelve ounces of pichi and has regained all his former good health, strength, etc. But the urethral discharge and slight burning continues at the same point, one and one-half inches from the meatus. Passed a bulbous steel bougie (No. 24 Fr.) and found(?) slightest stricture and soreness. The shoulder of instrument was coated with muco-pus when withdrawn. Then passed a No. 14 Eng. steel (conical) sound up into the membranous portion of urethra and found nothing in the way of tenderness or pain. Patient's urine was directed to be passed in morning in two vials, the first and last portion brought for inspection. Pichi discontinued. On repeated microscopic examination continuing for a period of over two months there were found a few pus globules in the urine last passed, and also in that drawn from the bladder with a soft elastic catheter, the urethra being washed out as the instrument was introduced; showing how persistent the condition of pus in the urine may be and probably is in all cases of cystitis, when the pus globules can be found if looked for.

In this case they gradually grew smaller in size and in number from the effect of the repeated washing out of the bladder with carbolized water and boric acid solution, until they were *non est inventus*. The urethral difficulty was promptly cured by passing as large a steel sound as the meatus would admit every third or fourth day, and the use of the carbolate of zinc injections. Then the urethra was still further dilated or stretched at the affected point, by a steel branched dilator of my own device, with a cigar-shaped end; the shank being cut away to a degree of thinness so as not to tear the meatus.

The patient remains perfectly well now after the lapse of one year and a half.

The foregoing affords, I think, a precise and intelligible indication for the use of pichi in this form of bladder disease, and it also shows, none will fail to discover, that however useful a drug may be in certain conditions of bodily disease, there is a limit to its usefulness, and a time when other measures must in their turn be

resorted to in order to make a satisfactory and expeditious cure. I have no doubt but that an earlier resort to instrumental dilatation of the urethra and the use of such injections would, with antiseptic washing out of the bladder, have cured the patient sooner. Still, all is well that ends well, perhaps, and one is fortunate to see such a case through from its inception to its close without losing his patient's patronage or his fee, or both, because he is not cured fast enough to satisfy him.

I have had my doubts about the origin of the affection being as stated by the patient. However, as long as he did not communicate the disease to his wife, so far as I could learn from questioning both, we must incline to believe he told the truth.

Another indication for the use of Pichi I have observed clinically with marked success is: That protean form of indigestion and derangements of the primæ viæ and the assimilative disorders which culminate in an excess of lithates or urates in the urine. Perhaps some would call it the "lithic acid diathesis." Be that as it may, pichi has never yet failed (and I nearly always gave it alone in ½ to 1 teaspoonful doses 3 or 4 times a day largely diluted, an hour or so before meals) to increase the appetite, improve digestion and assimilation to such an extent that all these excessive "out-puts" of lithates or urates have vanished.

In cases of biliousness and malaise following the breaking up of an attack of the malarial fevers, also after subduing the prominent symptoms of rheumatic affections, then comes the "reign" of pichi, and in these and kindred deviations from the normal standard of digestive and assimilative functions, pichi is supreme. That it will circulate around in the system till it gets into the kidneys and bladder and walk off with what sand or gravel lies around loose in these respective organs, I am not prepared to say, but my experience with it justifies me in placing it high in the list of remedies (*i. e.* drugs) that may be properly called prophylactic of gravel and stone formations, through its remarkable influence in restoring the digestion and I believe also the assimilative forces of the system. It will, no doubt, greatly assist the time-honored alkaline treatment for these affections and when alternated or substituted for them (at the proper time and in proper doses), will not disappoint all reasonable expectations.

DISEASES OF CHILDREN.

BY V. A. LATHAM, B. SC., F. R. M. S. (LOND.), ANN ARBOR, MICH.

DIARRHŒA.—*Synonyms.*—Acute gastro-intestinal catarrh; zymotic diarrhœa; inflammatory diarrhœa.

Occurrence.—This disease is most common during the hot weather of July, August and September, and effects both infants and adults, though it is the former that suffer most. It is much more fatal in the crowded courts of the large towns than in the country. There is a close connection between a high temperature and diarrhœa; it is uncertain how the former acts. The attacks are sudden, or they may be preceded by a looseness of the bowels, and are accompanied by vomiting, watery stools, and feverishness; the stools are watery, of a yellow or green color, and contain undigested food; later they consist of mucus or dirty water. The vomiting mostly ceases after the first day or two. The fever is seldom more that 101° to 102°.

Symptoms.—The infant is thirsty, restless; later its face becomes pinched and pale, and rapidly wastes. If fatal it becomes drowsy, perhaps convulsed, and passes into the state termed "false hydro-cephalus." At times the acute symptoms are succeeded by dysenteric diarrhœa due to follicular ulceration of the colon, accompanied by tenesmus and the passage of bloody mucoid stools. The post-mortem appearances consist is swelling and injection of the mucous membrane of the stomach, Peyer's patches are swollen, the most marked changes are usually in the large bowel, and, if life has been prolonged, the solitary glands are swollen or have been converted into ulcers.

Treatment.—In the treatment all milk foods are stopped, and weak meat broths with barley water or whey and barley water substituted, or Mellin's food made of broth may be used. In the early stages small doses of castor oil or calomel, with large enemas of arrowroot or salt; later, stimulants, camphor, bismuth, or zinc oxide. During convalescence, mineral acids.

CHRONIC GASTRO-INTESTINAL CRTARRH—ATROPHY—MALNUTRITION.—The wasting or atrophy of infants is a condition which is secondary to an intestinal catarrh or an atrophic state of the intestines.

Symptoms.—In most cases the early symptoms consist in diarrhœa or chronic vomiting, followed by wasting, which after awhile becomes extreme. The *stools* are liquid and contain undigested food; later they consist of decomposing curd or are of a bark-brown color. Vomiting is sometimes the most marked symptom. The appetite is sometimes voracious, and the infant, in consequence, is fed with thick semi-solid food. It cries incessantly, night and day, completely wearing out the patience of its nurse. Parasitic stomatitis appears on the tongue and soft palate, the skin is harsh and dry, the buttocks and genitals red and excoriated; the face is shrivelled and of an earthly tint. The wasting often becomes extreme, the skin being wrinkled and folded. In the latter stages the infant becomes heavy and drowsy,

its temperature low, with, perhaps, muscular twitchings or convulsions. Catarrhal pneumonia is not uncommonly found at the post-mortem. In the earlier stages the mucous membrane of the stomach and intestines are swollen, and much mucus is secreted; in the later stages they become thin and semi-transparent from atrophy and destruction of the glandular apparatus.

Treatment.—The treatment consists in giving the infant suitable food, as a wet nurse, peptonized milk, cream mixture, etc., and bismuth and pepsin, alkalies with bitters.

CONVULSIONS:—Have been divided into three classes—viz:

1. Primary or essential convulsions dependent on various exciting causes, such as mental emotions;

2. Sympathetic convulsions dependent on nerve irritation, such as teething, disordered digestion, and organic diseases excepting those of nerve centres.

3. Symptomatic convulsions dependent on diseases of the brain or the cord.

Causes.—Children born of epileptic parents or of those married young are strongly predisposed to convulsions. The exciting causes are numerous, such as fright, strong mental emotions from whatever cause; dentition due to reflex irritation of 5th pair of nerves. Disordered stomach or bowels from administration of improper or too large a quantity of food, similarly they may follow an attack of diarrhœa. An attack of convulsions may usher in one of the eruptive fevers. Pneumonia may be preceded by them. They may arise from uræmia, or during an attack of whooping cough; lastly, they are generally symptomatic of brain or spinal diseases such as inflammation of meninges, tumors, etc. etc.

Symptoms.—These differ greatly in individual cases; generally the child has been dull and heavy for a day or two previously; there has been more or less feverishness, and if the result of teething, the gums have been hot, swollen and tender. If from dyspepsia there have been evidences of disordered digestion, such as constipation, diarrhœa, vomiting or loss of appetite. The child grinds its teeth, twitches and jerks its limbs during sleep, or wakes up with cries of fright, the thumbs are generally turned inwards, and the eyes roll about uncertainly and the respirations are irregular. In a great number of cases, however, there are no premonitory symptoms; the child, otherwise in perfect health, is seized suddenly with a convulsion. The appearance of the patient is as follows: The eyes are turned upwards, generally; but sometimes downwards, and roll about with a jerky movement, the pupil is sometimes contracted, sometimes dilated, the muscles of the face and neck are distorted and thrown into irregular and violent action. The child froths at the mouth, teeth usually tightly clenched, respiration short. In the severer forms of convulsions, the muscles of the limbs are affected in addition to those of the face, the head being thrown backwards and oscillating from side to side. The face assumes a purple hue, the head is very hot—the child is of course insensible. There frequently is involuntary defæcation and urination. A fit may last from a few seconds to ten or twelve hours. When it comes to an end the muscular movements cease, and the child generally falls into a sleep, from which it awakes always feeble and exhausted. Very often there is but a brief respite, and the first fit is succeeded by another, and another, until a fatal termination takes place, and the little sufferer dies from asphyxia, the irregular and violent contractions into which the respiratory muscles have been thrown being the cause of this untoward event. A convulsive attack is frequently difficult to distinguish from epilepsy, but the progress of the case, and especially if it happens to be under observation for any length of time, will clear up all doubts. Chorea is easily distinguished from infantile convulsions, as in the former condition the movements are not altogether involuntary, and are not accompanied by insensibility.

Treatment.—The first indication is to remove all exciting causes; if the gums are tender or swollen they should be freely incised. Want of cleanliness in dressing the navel-string in very young infants is occasionally the cause of convulsions. If the stomach is overloaded with indigestible food, an emetic should be given. During the seizure a hot bath, with cold to the head, either in the shape of evaporating lotions, or better still, ice, is indicated. Care should be taken to loosen articles of clothing. The administration of hydrarg. c. cretæ with pulv. rhei as a powder, with a mixture containing pot. bromid., is perhaps the best medicinal treatment. If worms should be the cause of the convulsions, they should be treated accordingly.

(*To be continued.*)

CONCUSSION CAUSED BY RAILWAY ACCIDENTS.*

BY W. F. BURRES, M. D., SIDNEY, ILL.

In the service which physicians render to railway companies, probably nothing is better appreciated than correct prognosis in apparently slight injuries. Actual services rendered are easily remunerated so far as both company and physician are concerned, and as a rule rail-

*Read at the Meeting of the Surgical Association of the Wabash and Western Railway, at Detroit, Mich., and reprinted from Journal of National Association of Railway Surgeons.

way officials are glad to adjust any proper claims for damages, but are often called upon to pay what may seem to be an unjust bill. When these cases are put into the hands of the medical adviser, and the interest of the company as well as that of the claimant are largely at the disposal of the railway physician, it is doubly necessary for him to look as far as possible into the future of the claimant's life and predict the result of his injury with the utmost care and truthfulness.

While the laity and the laborers generally think it is the sworn duty of every claim agent to pay as little as possible for every damage to life or person, we, as physicians, know quite differently and are at times compelled to feel, with the claim agent, that it is the sworn duty of every injured person to get more money from a corporation for an injury than many times the injured's value to himself or family. As a local surgeon we can, in the great majority of cases, sign in our personal injury report: "Prognosis favorable," and have no fear of the results. Especially is this the case in most of the injuries to employes in which a hand or foot is crushed or totally lost, but we would call your attention to a class of injuries which might seem more trivial than the above and yet be productive of far worse results.

I refer to concussion of the spine due to railway accidents. While the public is demanding faster time between the great cities, though the servants of that public are straining every nerve to meet the demand, and are making better road-beds if possible, easier cars, taking every precaution for safety, keeping a strict eye on every employe from dispatcher to section-hand, we cannot be totally free from accidents, and when they do occur we can hope for nothing mild in their character. Any accident causing the sudden stopping of a rapidly moving car filled with human beings in various positions, certainly has the elements to produce concussion in some form, varying from the slight jar with momentary dizziness to a complete case of paralysis of a part or all of the body.

We think it reasonable to suppose that nearly every case of death in an accident, save those of actual violence from the wheels, may be due to concussion as its origin. It is not unreasonable to suppose that many who have perished from fire or steam in a wreck, had been only stunned at the time, unable to move, but if allowed to have remained quiet and undisturbed for a few hours, might have been listed with the slightly injured. Many persons who are helpless and often insensible at the immediate time of an accident, soon recover sufficiently to care for themselves and others—there is a physiological reason for this apparent fright. For when we consider that man's care of the body is so nearly reflex, and when we remember that in concussion we have a very highly agitated condition of the molecular matter composing the spinal centre or cord, man's reflex action for the time becomes greatly disturbed, and consequently he may be at the mercy of the elements surrounding him to a certain extent.

The physician has more to do with the case that partially recovers and yet has sufficient inconvenience to warrant him to demand damages for injury. These cases possess a few peculiarities not to be found in any other line of practice, for the signs or symptoms of concussion are very plainly written when once developed, but the difference of time elapsing from date of injury to severity of symptoms varies so much, and the intensity of symptoms has such a varying period of development, that we can never watch a case of injury to the spine or head too closely, or be too guarded in our prognosis.

It is not the design to give a treatise on differential diagnosis of concussion, contusion and compression, but to particularlize that class of ailments arising from the injury commonly called concussion and produced by a blow or sudden shock of any kind without producing any visible lesion. Direct blows upon the spine or head may perhaps be classed as causes in most cases, and especially so when the muscles are relaxed. This is precisely what occurs when the back or head or nates are thrown forcibly and unexpectedly against the back of the car seat or some portion of the car. A great per cent. of these cases are never heard of after the first twenty-four hours and are very trivial, but the ones reported later are usually fraught with some danger to the patient and much annoyance to the railway.

I have in mind two cases from practice, showing the difference so marked in these cases.

Case 1.—On Saturday night last I was called to see a man who had been forcibly thrown to the ground by a vicious horse. The patient struck upon the cervical region of the spine and back of the head. A few scalp wounds were found to need dressing, and no other lesion was visible; but the man was pale, cold from head to foot; a little blood issued from the mouth; unconscious; left pupil normal, right dilated; respiration not far from normal, and when, later, aroused answered questions incoherently; still later repeated questions often. Warmth applied to body; sinapisms to precordial region; horizontal position maintained. Wounds of head allowed to bleed little as possible and were dressed at once. Twenty-four hours later patient felt very comfortable, was rational, and everything bid fair for him to go about his work in a few days without the least inconvenience.

In contrast with above case, I will relate a case which illustrates the reverse condition of things from a like cause.

On May 13, was called to see boy of 13 years, who had received a severe blow on the lower cervical region, some three weeks prior to the time called. Was informed that at the time the blow was received patient did not suffer much; had some dizziness; vomited a few times; walked home with some staggering in his gait, which afforded amusement to his play-fellows. At time of call had no visible lesion whatever, but had incontestable proof of the blows and the locality. Found intense soreness of the muscles of the chest, rather a hyperæsthesia of the chest and abdomen; inability to use arms to any extent. Hyperæsthesia increased and contraction of muscular walls of the chest and abdomen. May 15, same with retention of urine and cystitis; bowels very fnactive, some enlargement of abdomen and feet—œdematous. About this time extreme hypochondria was to be noticed; patient repeated questions; pulse normal; appetite good, and up to this time had steadily refused to lie down during the day, but sat up. May 19, patient cannot walk without aid; pupils dilated; measurement of abdomen shows increase; slept well, but very dull; does not take any interest in anything around him. Things continued this way to about June 1st. Had hypochondria to a great degree; œdema of feet; purple spots over the body; cannot raise hand to head; urine very scanty; patient still insists on sitting up. about this time we ordered iodide of potassium internally, and while tonics had been of no use up to this time, strong counter-irritation was applied to the spine. On June 10, soreness or hyperæsthesia was much decreased; purple spots leaving the surface; voids on an average 32 ounces of urine in 24 hours; succeeded in getting patient to lie down; œdema leaving the feet, and complains more of a tingling in the feet and limbs. June 24th, patient cannot walk, but is slowly improving. Is being treated by use of iodides and cantharidal vesicant applied to the spine.

While these cases, taken from practice in the last two months, do not show what may be the result after two or three years, I would speak of one more case taken from practice over four years ago. That of a gentleman 60 years of age, injured on a railway train. Had no bad symptoms for four weeks after injury, but in three months from time began to have irregular gait; numbness of limbs; extreme hypochondria and very deplorable manner socially and mentally.

Suffice it to say that the case was one of concussion, as there was severe injury to the skull and slight depression. This patient was treated with tonics and counter-irritation to the spine; also electricity, with some benefit at times, but four years from date patient is not any better than in one year from injury. ERICHSEN gives several well-authenticated cases of development of the more severe and unfavorable symptoms as late as eighteen years from date of injury. I believe I am justified in saying that the cases which develop the bad symptoms late are the much more deplorable in results, and that those cases which do not recover in eighteen months to two years from date of injury, when acute symptoms rapidly merge into the subinflammatory condition, may be classed as incurable. As to treatment of these cases in the acute or inflammatory stage rest is unquestionably the sheet anchor, and we may as well expect to cure a badly sprained ankle with the patient walking about, as to try to cure a case of true spinal concussion without perfect rest, and as mental depression and hypochondria are ever-present symptoms, the quietness necessary seems sometimes very hard to enforce. Next to this course, tonics and counter-irritants accordingly as the condition of the nervous centres are congested or anæmic, and at this point we may often, very often, be handicapped to know which would be indicated, for the line of treatment proper in the one is quite likely to not only be useless, but probably hurtful in the other.

DRESSING AND DRAINAGE.

BY E. R. LEWIS, M. D., KANSAS CITY, MO.

In pursuance of a notice received from the Secretary of the Association, I shall try, without apology, to contribute my mite to so important an occasion.

Surgery as practiced to-day would have us dispense with drainage in a most philosophic way. But we, who have to deal with extensive and destructive contusions and lacerations, will probably be the last to be able to report the successful treatment of all such injuries without suppuration and its attending sequela—septicemia and pyemia. I am willing to concede that hospital gangrene is a thing of the past. The dressings used in modern surgery seem to have almost, if not quite, eliminated this terrible monster from our midst. And I think we can justly claim it is due to our modern dressing. No greater boon has ever overtaken the unfortunate since the introduction of anæsthetics. The healing process now made actually pleasant, according to some, by judicious dressings, where the unfortunate is relieved of the gnawing and agonizing pain and discomfort of carious and necrotic tissue, where we see in place of the sloughing, ulcerating wound the rose-tinged margins united by first intention, finishing the healing process without even leaving behind the broad cicatrix of semi-organized tissue to worry and constantly remind by an occasional pain, or ulcerating spot that nature had either slighted or was prevented doing a perfect work, which, as a rule,

characterizes her exertions. How very pleasant it is for us to be able to witness the completeness, and perfection of such work under a judicious dressing, when without one drop of detected suppuration, where the eschar is so very faint, and union so perfect that we can, in the place of the hard, thick and semi-organized tissue of a large eschar, find the smooth tough and elastic integument almost complete in its original perfection; giving to many stumps the requisites necessary to comfortably wearing artificial limbs, where we have both pressure and compression.

We, who are so much interested in the best results in every case, must not forget the necessities on our part, not alone of dressings, but thorough coaptation of parts either osseous or tegumentary, followed by such dressings as will insure not alone support but as near absolute rest as the individual case will permit. The inflammation necessary to repair after the solution in the contiguity of a part, is most easily and readily controlled by appropriate dressings, and if we could but believe the written and verbal reports which reach us almost every day, it would indeed seem not such an unpleasant thing to suffer an occasional fracture or amputation as a means of temporary recreation, or rest from the excessive mental and physical drain so often manifest by the wornout and shattered doctor, who turns to the list of stimulants for relief, which adds to rather than detracts from his cares and burdens. However much I am willing to believe and seek the positive demonstration necessary to relief, I am as yet compelled to believe that to provide for proper drainage is to protect the sufferer and save the surgeon much uneasiness and annoyance, and oftentimes actual chagrin.

Indeed, gentlemen, I am so imbued with the importance of dressings and drainage that to neglect the slightest detail creates within me more uneasiness and anxiety, than to take time and pains to do it right a score of times.

How often do we hear it said, "he is a skilful operator but a poor physician," and can we account for it on no other ground than that he pays but little attention to details. And I am compelled to believe the immortal GROSS was right when he said, "'tis the little things that make the successful doctor."

I suppose there is no subdivision of surgery that can compare in importance with that of dressings and drainage in railroad surgery, for proportionately I dare say we have to deal with more amputations of extremities, extensive contusions and lacerations than any other department of surgery; and when we stop to consider that in almost every amputation the transverse division of the long bones exposes the patulous mouths of the vessels which so rapidly absorb and take up any material that should be gotten rid of by drainage, material which has been hemmed in by the rapid union of the integument, and the general system must suffer from the accelerated effort of nature trying to throw it off, and from the toxic effect it produces when absorbed.

That there must of necessity be some need of drainage after any and all operations of importance I presume to say we must agree. The ligation of a vessel and its consequent slough, the suppuration of tissue in its continuity, leaving particles of its distal portion either to slough or be absorbed, the lodgment of foreign particles of matter during the mechanical process, must of necessity leave behind an exaggerated work for nature to do, which, unaided by appropriate drainage she often refuses to do, or else fails for want of ability to do, and therefore it falls upon the surgeon to lend a helping hand, not alone as a physician in the administration of stimulants and antitoxic remedies, but as a surgeon furnishing appropriate dressings and drainage. And I ask: Can we too highly estimate such assistance to nature? Indeed is it not our imperative duty to furnish such assistance in every case, although it be prospectively, for it may, and does occur that we need not alone such precautions, but when the necessities do arise, have we the time, and nature the endurance to maintain the delay it occasions? If nature has, and does not prove her ability to compete with all such emergencies, then we are not warranted in providing such contingencies.

Admitting that drainage is necessary, should we not assist oftentimes by appropriate dressings as well as furnish a source of egress?

There has been a marked and beneficial impulse given to modern dressings, especially through the services of eminent men, most markedly at Leipsic and Munich, still we find that in the sixteenth century the eminent services of AMBROSE PARE contributed not alone the ligature, but emollient dressings which certainly did mark as great improvement over the old as the now improvement is over the then new.

It is not my purpose to mention any special dressing or any special method of drainage, but let each case in the hands of the intelligent physician and surgeon receive its appropriate attention in either direction. Could we but make rules to which there would be only an occasional exception, then could we have fixed prescriptions and methods; but unfortunately for us individually, each case must stand out separate and distinct in some particular, having its own idiosyncrasy, heredity or acquired disposition, thus throwing upon the physician and surgeon responsibilities and cares in study and execution greater than devolve upon any of the remaining learned professions.

Therefore I would conclude by saying drainage and dressings adapted to individual cases

must be the product of the attendant in charge; and experience has taught that proper dressings and drainage not only accelerate the repair but assists nature in making her work more perfect. And I personally provide drainage in all amputations (except fingers and toes), using bone drainage in preference to rubber; and the more experience I have, the more I become attached to this method. Occasionally a few strands of cat-gut may serve every purpose.

Correspondence.

PICHI.

In the AGE for Dec. 26th, 1885, I first saw this drug mentioned, and I have since carefully watched the reports in various Journals.

After reading a report of its wonderful action in the AGE for January, 1887, I determined to give it a trial. I had then on my hands a woman whom I had been treating for vesical irritation a year and a half. I prescribed pichi, and when I saw her six weeks afterwards, she said she was having no bladder trouble at all. I inquired how long she had taken the medicine and was informed that she had never had the prescription filled.

If this patient had taken pichi I certainly should have given it the credit of having relieved her; but for some reason she had improved without treatment of any kind.

I have now used pichi in eight cases, five of the cases were women, all of whom had some pelvic trouble.

The first case had uterine prolapsus and occasional attacks of vesical irritation with great pain on passing urine. I had used buchu for her and it always relieved the pain to some extent. Pichi did no more than buchu, and was more disagreeable to the patient.

The second case was vesical catarrh following pelvic cellulitis. Pichi had no effect except to nauseate the patient. Buchu and hyoscyamus were given afterwards, and the patient improved.

The third case had some uterine prolapsus, but the chief trouble was from painful and frequent urination. Pichi had no effect whatever and the last I knew of the patient she was dragging along about the same as when I first saw her.

Case four had severe leucorrhœa, very purulent, accompanied by painful micturition. I used borate of sodium as a vaginal injection, which stopped the leucorrhœa; but she said the pichi relieved the painful micturition before the discharge ceased.

Case 5.—Uterine prolapsus with cystitis and urethritis. Pichi had no effect, buchu the same. I then applied iodine to the meatus and along the urethra, and gave the following:

℞ Benzoic acid, ʒ j.
Borate of soda, ʒ j.
Mucilage acacia, ʒ jss.
Water, ʒ iij.
Syr. tolu, q. s. ʒ vj.

M. Sig.—Two teaspoonfuls after meals.

It relieved her, at least she has had no trouble with the urine since, about two months.

Case 6.—A young man who had had gonorrhœa several times, and was then troubled with gleet and vesical catarrh. Pichi had no other effect than to cause him to go to another physician.

Case 7.—Man of 50 years; enlarged prostate with some irritation of the bladder. Pichi had no effect.

Case 8 is now using pichi and believes it helps him. He has vesical catarrh.

In my hands pichi does not seem to have much benefit in the bladder troubles accompanying pelvic troubles of women.

I generally started with 15-minim doses three or four times a day, and increased it to a drachm unless it nauseated the patient.

The patients complain dreadfully of the taste and I have not succeeded in finding what would disguise it.

J. G. BILLER, M. D.

CORRECTIONVILLE, IA.

TREATMENT OF SCARLATINA.

Some one in the "Medical Brief" for August, 1888, asks, in regard to treatment for scarlatina: "What do you think of cold sponge-bath, cold to head, etc.?"

This calls to mind an affair of the long, long ago, of a woman, a lay practitioner of medicine, who claimed to have received upon her shoulders the mantle of a former lay practitioner, whose "forte" was the successful treatment of "canker rash." She said, in my presence, that "when she was called to see the child, at MRS. JONES', she found him suffering from erysipelas, scarlet fever, and canker rash, and that, as erysipelas was the most prominent symptom, she at once wrapped the child in a sheet saturated with cold saltpeter-water, which cured the erysipelas at once, and if the child had only lived a little longer she should have cured all the other ailings."

T. B. NICHOLS, M. D.

PLATTSBURGH, N. Y.

The reports which come from Florida of the prevalence of yellow fever are, fortunately, somewhat exaggerated. A few cases have occurred, but they are of a sporadic nature, and the danger of the disease becoming epidemic does not seem to be great, although the most stringent precautions against its spread have been taken.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., AUG. 25, 1888.

Editorial.

SHOULD THE NEW-BORN BE WASHED?

The question will, doubtless, strike some as the concentration of absurdity. Have not children been washed, in civilized communities, as soon as possible after the cord has been cut, from time immemorial, and does not the squaw in her native state seek the convenient stream in which to lave her papoose, before she does anything else, save to remove the after-birth? And children have been reared in apparently sufficient numbers to meet the wants of all times. Then why a question which implies the possibility that these ablutions have been useless if not, indeed, harmful? We live in a progressive age, and the fact that a thing has been is not, in itself, a sufficient reason for its continuance. To assume that a practice is correct simply because it has been sanctioned by usage, is to argue perfection—an attribute which does not inhere to humanity. If it be wrong to wash the newly-born child, the fact that it has always been washed does not make the practice right, and as conservators of the well-being of humanity, in its lesser as well as in its greater embodiments, it becomes the physician to question even traditional practices.

The child, on expulsion from its parent, leaves a temperature of about 100° for one of about 75°, the usual temperature of the lying-in room. The reflex of this application of cold air starts the lungs, the child cries, and the machinery of independent existence is set in motion. This accomplished it would seem that the infant should be gradually inured to its changed conditions. The custom, however, is to subject it to a very severe hardening process immediately, in the shape of the bath of soap and water and friction with the towel. We have always looked upon this treatment by the nurse as very harsh and unnatural. The inferior animals with their skin protected by a heavy coating of hair, are subjected to nothing more severe than the gentle licking of the mother's tongue, and why is it that the delicate skin of the child should be irritated, and its frail system shocked, by the rude manipulations of the nurse immediately on its introduction to its new environment, is one of the questions which has puzzled us, more or less.

We are pleased to observe that the incongruity of the plan, so long sanctioned by custom, has presented itself to others, and notably so to the Maternity Department of the Woman's Hospital, of Philadelphia. The practice adopted by that institution is one which both recommends itself to common sense and is attended by results which are highly satisfactory.

It is the practice there to wash the child's eyes at the earliest opportunity, with an antiseptic solution. The infant is then enveloped in a wrapper of soft material and placed gently beside its mother until the placenta has been expelled. This expulsion, being left, as largely as may be, to nature, occurs within an hour. After the mother has been cared for, attention is given the child. This attention consists in its simple investment with a loose garment and the adjustment of a diaper. Thus dressed, it is laid away quietly by itself, and warmly covered it is allowed to remain without washing or dressing or other disturbance for twenty-four hours. At the expiration of this time it is carried into the baby's bath-room, which is properly heated, and then receives its first toilet. It is claimed that after this treatment the child thrives better and cries less than after the treatment generally adopted. We are quite prepared to fully concede this claim. Unquestionably after the first cry accompanying the establishment of respiration, the child cries because it is in pain, and the "three month's colic," which we have been led to believe is quite in accordance with nature's plan, is, in all probability, due the unnatural treatment to which its victim has been subjected. We believe the adoption of the plan inaugurated by the Maternity referred to would be very much to the advantage of the infant.

SOME NEW DRUGS.

We are in receipt of a circular from Messrs. Parke, Davis & Co., of this city, calling attention to a list of drugs of recent introduction, and to several of which we have seen casual references of late in some of our exchanges. With any commercial features which the circular may, either directly or indirectly, present, we have nothing to do, but it contains some points of scientific interest which no one who is alive to the future of our materia medica (the practitioner's armamentarium) may pass lightly over. The drugs in question are not presented with the customary laudation of their therapeutic qualities, but are placed before the profession tentatively. Sufficient has been gleaned from observation of their effects

as employed by the natives of their habitats and from physiological tests to which they have been subjected, to warrant a test of their therapeutical properties. And to this end the enterprising pharmacists referred to are willing to contribute within their province. They announce that they will furnish, gratis, samples of the various drugs to those who will agree to put them to clinical tests, and to report the results, favorable or unfavorable, for publication. A circular embodying all of such knowledge as they have been able to gether, will accompany each sample.

The following are the drugs which it is proposed to subject to this commendable plan of "collective investigation:" Cocillana (*Sycocarpus Rusbyi*, N. L. Britton); Anhalonium Lewinii (Henning); Orthosiphon Stamineus (Bentham); Embelia Ribes (Burm.) Rhamnus Wightii (W. & A.); Newbouldia Lævis (Seeman).

Certainly what has already been discovered concerning these drugs warrants the clinical tests which is invited, and we trust our readers will generally avail themselves of MESSRS. PARKE, DAVIS & CO.'S very liberal offer.

PTOMAINES.

Ptomaines, the products of decomposition, have come to occupy a prominent part in the etiology of disease, and, doubtless, this prominence will yearly be added to, as the nature of the alkaloids and the processes of their generation, especially in the living body, become better understood. As yet our knowledge of the ptomaines is derived almost exclusively from investigations of decomposition as it occurs in the body after death, and we know little or nothing of their generation in the living body. We talk somewhat vaguely of auto-infection as a cause of disease, but we know very little of the materies morbi of this infection. Herein lies a broad field for research. The ptomaines already discovered and traced to their origin already number upwards of twenty. Among them are the following: Tetanotoxine, tetanine and spasmotoxine found in tetanus cases; neuridine, midatoxine midine and cadavarine, in human cadavers; saprine, putrescine, midaleine, hydrocolloidine, choline, and neurine, in decomposed meat; parvoline, muscarine, gadanine and betaine, in stale fish; typhotoxine, in typhus fever; and tyrotoxicon, in cheese. The similarity of the action of many of these to that of curare is very interesting and suggestive.

This is the season of the year when the festive Q-cumber is wont to W up.

Notes.

THE GERMAN MEDICAL JOURNAL HABIT.—Dr. John S. Hawley closed an address on the above subject before the Hospital Graduates Club with the following "song," which is certainly an admirable satire on an existing craze :

If we write so that nouns with their verbs don't agree,
That's German you know, quite German, you know.
If our meaning obscure and involved seems to be,
It's German, not English, you know.
But that kind of writing you read in Berlin,
In Heidelberg, Wien, where we've frequently been,
Don't mind how you end, if you only begin,—
Is German, quite German, you know.
Oh the queer things we do, and the queer things we see
Are German, you know, all German, you know.
No man in this wide world a surgeon can be
Till he's German, all German, you know.

We spend all our money to emulate Koch,
He's German you know, born a German, you know.
We cultivate germs tho' our raiment we "hock"
With our uncle, who's German, you know.
We bully our confrères with Volkmann and Braun,
With Virchow and Schroeder their arguments down,
And we knock them all out with Esmarch's renown,
They're Germans, native Germans, you know.
Oh the queer names we hear, and the queer names we quote,
Are German, you know, all German, you know,
We speak them, tho' each gives us a pain in the throat,
For they're German, pure German, you know.

We take out the stomach and resect the gut,
That's German, you know, quite German, you know.
The leaves of the journals in public we cut,
When they're German, true German, you know.
Our talk has a bacteriological drift.
We pay "twenty marks" for a pipe, for a gift,
And we quote from the *Berliner klin. Wochenschrift*,
Which is published in German, you know.
Oh the marvelous statements that come from afar,
Are German, you know, all German, you know.
But of course it's all right if it's German—*nicht wahr?*
That's the German for "aint it?" you know.

We think it improper to poultice a boil,
No German you know, would do so, you know,
And we make salad dressing with carbolized oil,
That's the custom with Germans, you know.
With carbolic inhalers we muzzle our jaws,
We wear underclothes of iodoform gauze,
We ignore the effect, and talk big about cause,
Which the Germans do always, you know.
Oh the queer things we do and the queer ways we live,
Are German, you know, all German, you know,
Of squaring the circle the method we'll give,
Or some German will give it, you know.

We consider a coccus the cause of a gleet,
That's German, you know, quite German you know,
We dress a cut finger in a haystack of peat,
That's German, true German, you know.
We put in a gum larynx and a celluloid tongue,
We exsect the spleen, and we resect the lung,
We save at the spigot, and leak at the bung,—
Oh we're German, we're German, you know.
But the queer way we feel when we count up the slain,
Is not German, you know, no, not German, you know.
And we've not enough nerve yet, to exsect the brain,
As the Germans will soon do, you know.

We write in the journals a great deal of rot,
As do Germans, you know, tho' they're Germans, you know
And we seek a small pin in a ten-acre lot,
For the Germans can find one, you know.
We discard the choice meat and chew on the bone,
We refuse the good bread and grasp at a stone,
We hoard oyster shells and the pearls leave alone,
That's German, true German, you know.
Oh the queer things we do, and the queer things we write,
Are German, you know, all German, you know.
We will swear that the ace of the spade suit is white,
If some German but says so, you know.

On sterilized pap our young infants we feed,
That's German, you know, quite German, you know,
And we hope by such means to improve on the breed,
For the Germans advise it, you know.
In training a puppy, or raising a foal,
In the search for an office, or the seat of the soul,

Or how to fit a square stick to a circular hole,
We get points from the Germans, you know.
Oh the queer tricks we play with our young babies' milk,
Are German, you know, all German you know.
Of sow's ears we make purses of superfine silk,
By a process that's German, you know.

We pour down the beer as tho' filling a tank,
That's German, you know, true German, you know.
And we eat Sweitzer Kase and Limburger rank,
That's German cheese with the gangrene, you know.
Frankfurters we love, and sauer kraut, too,
And we make no mistake when the spring Bock we brew,
But we bite off more science than we ever can chew,
When we follow the Germans, you know.
Oh for the queer things we eat, and the good thiugs we drink,
Thank the Germans, you know, bless the Germans, you know.
But we ball up our science, and our good sense we kink,
When we try German methods, you know.

"Speaking of 'August' reminds me that during this month and the previous one, when the summer season is at its height, when all the medical societies have adjourned, and the high grade and the low grade medical colleges pause in their mad career of grinding out callow M. D.'s for the supplying of a market already glutted, and rural stream with tender lips, its green and mossy margin presses, and even the stately willow dips her beauty to the tide's caresses. it is much more to the liking of a tired, weary and oppressed medical editor to go to the banks of the babbling brook and see and hear her babble, to meander neath the forest trees and seek within some silent nook his ease and enjoy the balmy shade and breeze, and sip ever and anon through the medium of a ripened stalk of grain properly trimmed, the limpid lemonade, the merry mint-julep, the genial, gentle and seductive gin-fizz, or, perhaps, the more domestic milk-shake (if one be fortunate enough to have the necessary materials at hand for their make-up), than it is to linger in the sanctum, frantically cudgeling his brain in search of an idea, no idea from day to day, industriously scanning his exchanges with paste-pot and scissors in hand, in a vain effort to find an oasis of thought in a desert of dullness, now and again catching through the gloaming of the rear apartments the cry of 'more copy,' until perforce he sends out matter for filling purposes which in the depths of his heart he knows is very diaphanous, and his only satisfaction is in the knowledge of the fact that his subscribers are too sensible to read much in a season like this, and weak points may be overlooked."

The above was found in the Weekly Medical Review, and is from the pen of DR. LOVE. The sentiment is one which we can cordially endorse, but we are somewhat anxious to hear what became of the man who penned such a sentence in the month of August. SENATOR EVARTS, in his palmiest days, could not approach it. LOVE is a good fellow, and while hoping for the best we fear the worst. He is too young to sacrifice himself in this way.

A man was recently summoned before the authorities in Paris charged with practicing medicine without the legal qualifications. He surprised his accusers at the trial by presenting a diploma, and when asked why, with this in his possession, he did not display it, he replied that he found it good business policy to parade himself as an illegal practitioner; that it would ruin him were he to make public his qualifications. That man is a good judge of human nature. There is in the masses a sort of distrust of scientific medicine. We frequently see its outcroppings in this country. It is the customary thing for some of our leading newspapers, when commenting on the illness and death of illustrious personages, to intimate that they were "over-doctored." During the late PRESIDENT GARFIELD'S last illness these "exponents of public opinion" urged that he be let alone or confided to the exclusive care of some old granny nurse, and more recently the same advice was tendered in the case of the late GENERAL SHERIDAN. The quack who rails at scientific medicine and proclaims himself a "natural healer" always draws the crowd.

ART EXHIBITION IN SEPTEMBER.—The new building of the Detroit Museum of Art will be opened to the public on the first of September, with a loan exhibition of art works of superior merit, consisting of the famous Seney collection from New York city and other paintings of the highest grade. The gallery will be open from 9 A. M. to 9 P. M., daily, until November 15th. The price of admittance will be a fifty cent silver piece on Mondays and a twenty-five cent piece on all other days. A coin will be accepted the same as in the old Art Loan, in place of the orthodox ticket, in order to save the making of change and avoid delay at the door. Excursions will be run over all roads centering at Detroit at greatly reduced rates, the tickets to include a coupon of admission to the Art Gallery. Those who wish to go to Detroit on these excursions should indicate it at once to the ticket agent at the depot.

It is reported that at a recent revival meeting in the east, the minister in charge requested all who made it a practice to pay their debts to rise. The rising was general. Then all who do not pay their debts were requested to stand up.

To this request there was but one respondent, and he was an editor. He explained his inability to pay what he owed by stating that most of the congregation were in arrears to him for their subscriptions to his paper. It is strange, but, nevertheless, true, that the public, and occasionally a doctor, do not regard the subscription to a paper as a debt. We hope the revivalist referred to, set his hearers right on this matter. When he comes west we can direct him to localities presenting excellent fields for missionary work.

We acknowledge with pleasure the regular receipt, with our exchanges, of Orvosi Hete Szemle, of Budapest, and are quite interested in its contents. The current number contains an exhaustive article on phenacetin, from which space permits us to give a short extract. "Azt kell felvenni, hogy a phenacetin eppen ugy, mint a salicyl-keszitmenyek, a chinin es egyeb antipyretikus szerek, kulonosen az arra praedisponalt egyeneknel purpuraszerü bantalmath epes eloidezni, mar olyan adagokban is, melyet mas egyenek jol türnek." We are quite assured that those of our readers who are at all familiar with this new antipyretic will cordially endorse this enthusiastic opinion of its properties.

One Dr. Uhler, of Baltimore, has figured the percentage of curable diseases down to a fine fraction. He says that "an examination of one medium sized practice of medicine shows that there are 155 common medical, including self-limited diseases, and for all of these cases we can do something, either in the way of relief or cure, that is about one-third. Another practice gives us 242, with 98 curable, equal to $\frac{2}{5}$, rather nearer $\frac{1}{2}$ than $\frac{1}{3}$, not a very flattering exhibit to be sure; and when the largest books are considered it will probably be $\frac{1}{4}$ or less, say $\frac{1}{5}$, and at this figure we will put it down." This method of figuring seems to be German, quite German, you know.

On general principles we are opposed to Chinese immigration but we could make exceptions in individual cases. For instance the S. Cal. Practitioner tells of a Mongolian who had been "made sick after same Melican man" by "one bad woman down town." He consulted a physician for a cure, but was not disposed to pay the fee required. On rising to go he asked, "How muchee you charge for time takee up?" On being told the charge for the consultation he deposited the amount and, smiling, bowed himself out. Our contemporary wishes that the example of this oriental were contagious, and so say we all of us.

Poor Louisville is again distraught. Here is the opinion which one of its medical journals has of one of its local contemporary lights: "He is the very quintessence of bitterness and gall, and has its impress thoroughly marked in every feature about him, and his value to the medical profession is about the same as that of the man in the moon to that luminary. He is only seen under strong reflected light." We never were very good at guessing, but with this admirable pen picture to aid us, we think we could locate the individual referred to.

Dr. Grace Danforth, a young lady practising medicine in Dallas, Texas, was recently admitted into the County Medical Society. She is the first woman to whom this honor has been accorded in that section, and her address on her reception was of a kind which shows her to be of material of which the Society may well be proud. And the members are proud of her. They received her with enthusiasm and with open arms (metaphorically speaking, of course).

The Mississippi Valley Medical Association meets at St. Louis, September 11-12-13. The programme includes many papers and discussions of importance. The first day will be given to the discussion of abdominal surgery. The second, to infant feeding and some obstetric subject. The third day will be taken up with volunteer papers and some neurological subject. The society cordially invites all members of the profession to be present. J. Lucius Gray is the Secretary.

An M. D. of the feminine order, writes to the S. Cal. Practitioner offering "to wager a fountain syringe against a half pint of Laplace's sublimate solution," that the chief cause of indigestion among male bipeds, is the rapidity with which the animal bolts his food. The fact that the writer is an old maid does not necessarily detract from the soundness of her opinion.

Therapeutic Brevities.

The Treatment of Flatulent Dyspepsia.— Pepper, in a recent clinical lecture, stated that flatulence may result from the excessive formation of gas. Under these circumstances, such remedies as sulphurous acid, which is a powerful antiseptic, will be found useful. It may be given alone or combined with small doses of strychnine. He prescribes as follows:

℞ Acidi sulphurosi, ʒ iss. vel. ʒ ij.
Strych. sulph., gr. ss.
Tr. card. comp., ʒ ss.
Aquæ, ad. ʒ iv.
Sig.—One drachm after meals, in water.

You may resort to a different class of remedies and give creasote. This is a local stimulant to the stomach, and in atonic cases is of service. It is at the same time a powerful antiseptic and anti-fermentative agent. Creasote is best given one-half or one hour after meals, when the process of fermentation is about beginning. At this time the gastric digestion should have passed through the acid stage, and the contents of the stomach should be neutral or alkaline. Given at this time, the creasote may be advantageously combined with an alkali, as sodium bicarbonate.

℞ Creasote, gtt. x.
Sodii bicarb., ʒ ij.
Pulv. acaciæ, q. s.
Aquæ, ℥ ij.
Sig.—Two drachms one hour after meals.

In place of the sodium bicarbonate in the above formula the subnitrate of bismuth may be employed.

If it is recognized that there is not only a state of atony with a tendency to fermentation, but there is also a deficiency of gastric power, pepsin, or ingluvin may be given. Pepsin is best taken in acid mixtures, and should be given at the acid stage of the digestion. At the same time, if the administration of the drug is postponed for a short time after meals, it comes at a time when the power of the gastric juice is about exhausted.

℞ Pepsin, fort ʒ j.
Creasote, gtt. x.
Bis. sub. carb., ʒ ijss.
M.—Et. ft. pulv. No. xxx.

One of these powders, in a small gelatine capsule, can be given one hour after each meal.

Ingluvin is a powerful digestive agent, and may be substituted for the pepsin. I have found it of service in cases where pepsin does not work well, and I should be disposed to say, where the mucous membrane of the stomach is decidedly irritable.

Again, in this same line of thought, we have agents, like powdered charcoal, which act as absorbents of the gases, and are, at the same time, anti-putrefactive and anti-fermative in their action. Powdered charcoal, with soda or bismuth, may be given a couple of hours after meals, and in the class of cases of which I have been speaking, may afford a great deal of temporary relief. When charcoal is given, the patient should be informed that it will cause blackening of the stools.—*The Polyclinic.*

PARSONS' LOCAL ANÆSTHETIC.—

Chloroform, 12 parts,
Tr. aconite, 12 "
Tr. capsicum, 4 parts,
Tr. pyrethrum, 2 parts,
Oil cloves, 2 parts,
Camphor, 2 "

Dissolve the camphor in the chloroform, then add oil of cloves, and then the tinctures.

The venerable DR. PARSONS, in sending this formula for publication, says: I can not expect to remain much longer in this world, and I want the profession to know the value of this local anæsthetic."—*Southern Dental Journal.*

FOR NEURALGIA.—DR. B. W. RICHARDSON recommends (Asclepiad, No. 18) the following formula in neuralgia:

℞ Croton chloral, gr. ij,
Quinia, gr. ij,
Glycerin, q. s.

To make a pill; to be taken when the attack threatens, and to be repeated every two hours until relief is obtained.—*Med. News.*

FOR HEADACHE.—DR. BRINGIER, of Louisiana (Medical and Surgical Reporter) says he has tested the efficacy of the following prescription in no less than twenty cases, and finds it by far the most valuable "headache cure" that it has ever been my good fortune *to try*, or to have recommended:

℞ Antipyrine, gr. xv,
Potassium bromide, gr. xv,
Tr. digitalis, gtt. vij,
Aquæ q. s. ad., ℥ ss.
Mix. Sig.—Take at once. (For adults.)

The above is especially indicated in headaches of fevers, accompanied as they are, for the most part, by nervous phenomena, cerebral congestion, and a full bounding pulse. Also in the condition designated as "migraine," and in hysterical women.

SALOL TOOTH-POWDER.

℞ Salol, ʒij–gr. v.
Pulv. os lepiac, ʒ iss.
Cretæ preparata, ʒ vj.
Magnesia carbonate, ʒ iv.
Pulv. sacch. alba, ʒ iss.
M. ft. pulvis.—*Dental Register.*

GALEZOWSKI'S ANTINEURALGIC FORMULA.

℞ Menthol, gr. xij.
Cocaine, gr. iv.
Chloral, gr. ij.
Vaseline, gr. lxxv.
M. ft. unguentum.

Sig.—Apply to the painful parts and cover with muslin.—Paris correspondent of the *Pharmaceutical Record.*

SEBORRHŒA OLEOSA.—This oily form of seborrhœa is rather frequent in women, and when it affects the face, giving a shiny, greasy appearance, it is the cause of much annoyance and considerable disfigurement. All alcoholic stimulants should be absolutely interdicted. Here is a good preparation to act on the sebaceglands:

℞ Aloini, gr. iij.
Zinc oxidi, gr. v.
Capsici, gr. x.
Exuracti gentianæ, gr. l.
M. ft. pil. in numero xxv.

Sig.—Take one four times a day.—*Medical Bulletin.*

Medical Progress.

THE TREATMENT OF MIGRAINE WITH INDIAN HEMP.—Among the opprobria of medicine, it is probable that no affection has held in the past, or now holds a more impregnable stronghold than migraine. In etiology, pathology, and nosological position, it is still an unguessed riddle, and in spite of every means or medicine, old or new, wherewith science and empiricism have attempted its quietus, it still tortures its victims by the myriad. In the phraseology of our revolutionary fathers, it is now no little let to "liberty and the pursuit of happiness," and it is not impossible that, as with the advancement of civilization the neurotic temperament becomes more pronounced, it will become a more serious menace to life than were ever the edicts or armies of tyrannical rulers.

Some sixteen years ago DR. RICHARD GREENE advocated in the columns of the British Medical Journal, the use of cannabis indica in migraine, and soon thereafter detailed, in the London Practitioner, a series of cases which seemed to demonstrate that the drug had in this disease decided curative power. Soon after, DR. SEGUIN, of New York, introduced it into practice, and was so pleased with its action that he gave it enthusiastic indorsement through the medical press. Later, DRS. LOTHROP, W. H. DRAPER, and F. P. KINNICUTT confirmed the views of GREENE and SEGUIN. This was in the year 1880, and since that time, though the drug has now and then been made the subject of a therapeutic note of doubtful weight, it seems to have been relegated to the vast department of the "weighed and found wanting." Some recent works in therapeutics do not so much as mention it as a remedy in migraine, while not a few others treat its claims skeptically and throw disfavor upon it in any case, because of the uncertain strength of its preparations.

In the London Practitioner for July, DR. GREENE makes an attempt to re-establish the claims of the drug to favor as an agent of value in this intractable disease. He brings forward reports of cases whose cure seems clearly due to cannabis indica, makes a number of valuable suggestions relative to its preparation, exhibition, therapeutic and alleged toxic effects, and enlarges upon SEGUIN'S saying that cannabis indica in migraine is nearly as efficacious as the bromides in epilepsy, in the following confident strain:

He says: "My experience in the treatment of epilepsy has not been small, and I have seen many cases of migraine. In reviewing both, I am confident that in my hands recovery has more frequently followed cannabis indica in migraine than bromides in epilepsy." The critical reader will doubtless say that this remark counts little for the drug as a curative agent, since few, if any epileptics are ever absolutely cured by the bromides; but it cannot be gainsaid that the claim of equal efficiency, if substantiated, would at once invest Indian hemp with therapeutic dignity of the second, if not the first rank among medicines.

For the successful exhibition of the drug, the following considerations and rules must be borne in mind: First, Treatment by cannabis indica is not merely a palliative during one paroxysm, like the use of guarana, caffeine, morphine, nitrite of amyl, or antipyrine, and its congeners; but is often curative, and nearly always gives some lasting relief. Second, It is necessary to persevere with the treatment for at least many weeks. SEGUIN obtains a promise from his patients that they will take the medicine for three months. It is usual, however, for improvement to show itself in a shorter space of time. Third, A fresh alcoholic extract only should be used; no other can be trusted for strength and efficacy. Fourth, One third of a grain, in pill, taken every night, or every night and morning, is sufficient to begin with; in severe cases the dose may be quickly raised to half a grain or two thirds. More than one grain should not be given except to patients habituated to its use, and this amount even then should not be prescribed unless the extract to be dispensed be of the same specimen from which the patient's last prescription was made up. If this precaution be taken, there need be no fear of a toxic effect. Fifth, Unlike opium, no craving for further doses follows its medicinal use, and apparently it can be given up without suffering or inconvenience at any time,

It is a question if cannabis indica is entitled to a place among the neurotic poisons. Several of the authoritative works in toxicology make no mention of it. The symptoms of nervous exhilaration, expansive delirium, catalepsy, etc., which sometimes follow upon an overdose of the drug, are always alarming to the friends and family of the patient; but no case of fatal poisoning has so far been reported. Cannabis indica would seem to be more useful in women than in men, because migraine in the former is often accompanied by some irregularity in the uterine functions, and the drug has long been credited with specific action on the uterus.—*Am. Prac. and News.*

HYDRASTIS CANADENSIS.—Dr. Schatz, of Rostock, recommended five years ago, at the meeting of German naturalists at Freiburg, hydrastis canadensis as a remedy for hyperæmia and chronic inflammation of the internal genital organs. Since then this remedy has been very frequently employed, and private as well as public reports testify to the certainty of its action within reasonable limits. The want of success which has been observed by some medical men is, according to Schatz, partly due to the fact that the drug was extracted in Germany, and consequently not from the fresh plant. He has repeatedly obtained remarkably good results when the preparation used was the one recommended, which is made from the fresh American plant. In cases of uterine myoma the menses became not only less in quantity and more regular, but he has even seen a case where the tumor, which had previously extended up to the umbilicus, had, after the constant use of the fluid extract for about two years, almost disappeared in the pelvic cavity. Schatz also confirms his former communications as to the fact that hydrastis causes no pains, but produces only dilatation of the vessels. He does not, however, wish to say that the drug makes all, or even most, operations for myoma unnecessary. The drug is also recommended in the too frequent or excessive menstruation of young girls. The hy-

drastis canadensis has, however, generally to be taken for a long time and with great regularity. Another remedy which has also come from America is, according to Schatz, most valuable in some cases, because we have no substitute for it, although it cannot be nearly so often employed as hydrastis. It is viburnum prunifolium, which was obtained from the United States. This arrests the pains that some women, who have previously aborted, are apt to have during pregnancy, and which only too often lead to the premature expulsion of the ovum. This drug also has to be taken very regularly and for a long time, in doses of from 40 to 60 grains of the inspissated extract. Under these circumstances, however, it cannot be replaced by opiates or by bromide of potassium. True, the opiates cannot be entirely replaced by viburnum, especially in all cases where strong labor has actually commenced and requires to be arrested as promptly as possible. It will be impossible in such cases to do without rest and the recumbent position, at least for some time; and success is, of course, only possible if the ovum is still living, and further interference with it warded off. But Schatz has some cases in which at the first consultation the death of the ovum could not be assumed, and where it was retained for months in the uterus by means of viburnum, while it actually had been dead all the time, as was shown by its appearance when abortion subsequently took place. The viburnum does not act quickly or powerfully enough to be applicable to cases of normal birth or labor coming on suddenly. Schatz cannot as yet tell how the drug acts—whether by stimulating the inhibitory nervous centre of the uterus or by paralyzing its motor nerves. He thinks the former the more probable.—*Lancet*, July 21, 1888.

The Hot-Air Bath in Relation to Ptomaines and Leucomaines.—Altdorfer has published an excellent paper on the hot-air bath in relation to ptomaines and leucomaines. The theory now generally accepted, is that the symptoms in most specific diseases are immediately due to animal alkaloids (called ptomaines), developed through the agency of a specific bacillus. Prof. Brieger, in his latest experiments, has now defined the chemical constituents of the ptomaines, elaborated by the bacilli of tetanus and other maladies. The ptomaines seem to be very useful to the bacteria in their struggle for existence with the living tissues, as the formation of poisonous products by the bacteria may enable them to destroy the leucocyte (or tissue cell) instead of being themselves destroyed. Gautier has shown that animal alkaloids, deleterious to the animal economy, are also a necessary product of vital physiological processes, which class of organic bases he has called *leucomaines*, to distinguish them from the above-mentioned *ptomaines* (produced by bacilli). There is considerable discussion on this subject, and it has not been demonstrated whether diseases are produced by bacterial ptomaines or by physiological leucomaines; but it is generally admitted that the ptomaines and leucomaines are not distinct or opposed to each other; that it is, on the contrary, impossible to trace the limits where the one series of alkaloids begins or the other ends. The next question to consider is to find out how to utilize this knowledge of the animal alkaloids in the treatment of diseases. Whenever there is, under pathological conditions, excessive elaboration of the animal alkaloids, either by the tissue cells (leucomaines) or by bacilli (ptomaines), the best plan to destroy these deleterious substances will be to imitate the ways of nature as far as possible; this is to increase the physiological eliminations and oxidations. In the hot-air bath we have a valuable method of increasing the absorption of oxygen into the blood, and, therefore, of assisting the cells in their struggle with bacteria by destroying the ptomaines. Additional advantages of this bath are that the blood, after the loss of a great quantity of water, is more concentrated and therefore allows the blood-corpuscles, charged with oxygen, to come into closer contact with the microbes, and further, that, similarly as in fever, the activity and movement of the amœboid cells are much increased by the somewhat raised temperature of the blood. The author describes the method of administering this treatment, and concludes by stating the views he holds. 1. That the specific diseases (cancer included) are caused by some virus, either produced by bacteria or by the cells of the body. 2. That the excessive production of these morbid substances may be counteracted by increased oxidation and elimination. 3. That the hot-air bath is the best method of increasing oxidation and elimination.—*Medical Press and Circular.*

Sulphurous Acid Fumigation in Whooping Cough.—The known difficulty of giving relief to the little sufferer from whooping cough, except in the most general ways, led me at first to doubt the correctness of the statements made in regard to the above method of treatment in the London Medical Record (Part 140, p. 59, New Series). Moreover one of the most recent writers (Dr. W. Squire, in Quain's Dictionary) epitomizes our experience of treatment thus: "We have no specific for whooping cough; no drug to check its onset or stop its course;" and again, "Attempts to cut short the disease by inhalations or insufflation of germicides fail."

It was thus with much hesitation that I decided to give the plan a trial—with what result I must crave my readers' indulgence to describe. Dr. Mohn says that the cases he tried the fumigation in "were healed as if by enchantment after one fumigation," and again, that they were "at once cured by the fumigation." I cannot advance such evidence of *immediate cure* as Dr. Mohn has given in the paper cited, but I can most emphatically endorse his statement of the benefit to be derived from the treatment. I applied the method of fumigation by sulphur according to the instructions given.

The method is the following: The children are in the morning put into clean clothes and removed elsewhere. All their clothes and toys, etc., are brought into their bedroom, and sulphur is burnt upon a few live coals in the middle of the room. The fire is allowed to remain in the room for five hours, and then the windows and doors are thrown open. The child sleeps in the room the same evening. About 25 grammes (a little under an ounce) of sulphur to every cubic metre may be burnt;

this is equivalent to rather more than ten grains per cubic foot. The additional precaution was having the day-room fumigated in a like manner during the night—the children practically lived in an atmosphere of diluted sulphurous acid gas for some days, while in several cases I had the process repeated at the end of a week.

In every instance, without exception, my observation leads me to look upon the method as a practical cure for whooping cough. There is no doubt about it—mothers and nurses all agree with me that an immediate improvement is effected. Cough is lessened in frequency, expectoration of the thick clogging, mucus much facilitated, paroxysms lessened in violence, and sickness after them as a consequence scarcely known. The children pick up quickly, and in no case has the cough lasted in its form of reduced violence more than a fortnight after the treatment commenced; it gradually but surely abates and ceases. I have had no specially severe bronchitic or pneumonic complications to deal with in the twenty or more cases in which I have applied the treatment, but I do not think I should desist if such complications existed.

My opinion must go for what it is worth, but I thoroughly believe that if this method could be at all generally applied throughout the country during, say, six months from any given date, whooping cough would become as rare a disease as the plague.

The action of the sulphur must be that of a germicide, and in twenty-five years' experience I have seen nothing like such results from any other kind of treatment.—Frederic Edward Manby, F. R. C. S. Eng., in *The Practitioner.*

Treatment of Dysentery.—A seasonable matter to which we desire to call the attention of our readers is the treatment of dysentery. The modern tendency is to strain evidence to prove the contagiousness of individual diseases and to magnify the importance ot the rôle played by bacterial organisms. Dysentery has not escaped this medical fad, and there is a marked inclination to consider it as a specific constitutional affection. The intestinal diseases of camps, prisons, and other places where people are crowded together in swarms, are probably constitutional, due to the presence in the blood of a definite poison, but to our thinking ordinary sporadic dysentery, the result of excessive heat, conjoined with imprudence of diet, and often exposure to cold at night, or other times, is as much a local disease as is pleuritis or sunburn. It ought, therefore, to be readily affected by local measures. In fact, if we examine the most effective methods of treatment, we find that they all have a direct immediate influence upon the affected parts. The saline depletes directly from the engorged portal circulation and stimulates the glandular apparatus of the colonic mucous membrane into activity; the mercurial labors with the hepatic viscus and also with the diseased mucous membrane; while the black, tarry discharges, which are the harbingers of ipecacuanhic convalescence, demonstrate the action of the Brazilian root upon the alimentary glandular apparatus.

The point we want to call the attention of our readers to is the *a priori* probability that direct medication of the colon will afford the most successful, as well as the simplest (because involving least the general system), means of curing acute colitis. In chronic colitis we long ago practiced the method with extraordinary success. Injections of a half gallon of medicated water into the colon once or twice a day have been attended with phenomenal results. On the whole, the use of a drachm of nitrate silver has been the most satisfactory; but in some individual cases the persulphate of iron, nitric acid, and various other medicaments have produced the best results. It must be remembered that it is a local, not a constitutional, effect that is desired, and that the solution must be strong enough to be effectual. The enema is always returned inside of five minutes, and we have never known of any evidence of abortion of the drug.

It so happens that we rarely see cases of acute dysentery, and we therefore appeal to our readers to try upon an extended scale local treatment of the acute affection, and to report in our columns. We know that large injections of ice-water often allay most markedly the tormina and tenesmus, but have had no experience with the direct applications of medicaments in acute colitis.

The materials used should conform with the results of experience with other mucous surfaces. Subnitrate of bismuth presses to the front as a claimant for trial, 1 or 2 drachms at a dose. Nitrate of silver may act here as in angina. Hydrastin, and even acetate of lead, are to be thought of, and especially would we suggest trial of nitric acid, in the latter stages. The field of colonic therapeutics seems to us open and inviting. Will not some of our readers enter therein, and give to us the fruit of their labors?

The method of giving the enemata is important. The best plan is to bring the patient into such a position that the buttocks, resting upon a bed-pillow at the edge of the bed, are so elevated that the natural tendency of fluid entering the rectum will be to run into the colon. The best form of syringe is the fountain syringe; if any of the forcing or pumping varieties are used, great gentleness must be practiced. An intestine which may angrily resist a rapid injection may often be readily persuaded to tolerate a large amount of fluid. The pipe which is introduced into the rectum should be large and flexible, and the effort should be to get it well up to the sigmoid flexure. In many cases of acute dysentery the lower part of the colon is probably alone affected, so that it is not always necessary to wash the upper portions of the gut; further, not rarely the injections should be practiced every two or three hours, and it does not seem necessary for the doctor himself to administer them. Any intelligent nurse can be readily taught to give them, but the practitioner should thoroughly assure himself that the drugs are really applied to the mucous membrane of the colon.—*Therapeutic Gazette*, August, 1888.

Treatment of Eclamptic and Uræmic Convulsions in Children.—(Gaz. Méd. de Paris, March 3, 1888.) The author lays down as a primary proposition that in every case of eclampsia in a child, one should first inform

himself of the condition of the urinary secretion. In eclampsia the secretion of urine is entirely suspended, though a small quantity of urine, which may have been in the bladder, is sometimes ejected under the influence of the convulsion. As soon as the discharge becomes quite abundant the evidence is sufficient that the kidneys are at work again, and then active treatment can be discontinued. The abundant discharge of urine in eclampsia, as in many other disorders of the nervous system, is a critical phenomenon, which announces with certainty the approaching termination of the attack, though there may be a few more spasms before the attack is entirely ended. Since dyspepsia is the most common cause of eclampsia among children, a wise arrangement as to diet and hygiene is the most useful form of prophylaxis. Children, especially the more excitable ones, should also be spared as far as possible the conditions of extreme excitement which are also prevalent in modern society. The prophylactic measures against cerebral irritation may be summed up in the one word isolation. Simon does not endorse Trousseau's plan of avoiding all active treatment for convulsions. To Trousseau's objection that mustard-baths and similar means only irritate the patient, the reply is made that children in convulsions are completely insensible and unconscious, and hence the therapeutic means which are used cannot produce irritation. First of all, one's attention should be directed to the alimentary canal; an enema with glycerin or any other agent should be given, then vomiting should be excited by tickling the throat, or by administering a suitable quantity of syrup of ipecac, with powder of ipecac during an interval between the spasms. If these means are not effective, an enema may be given composed of:

Sodæ sulph., 30 grammes.
Fol. sennæ, 8 grammes.
Aquæ, 200 grammes.
Mel. hydrarg., 100 grammes.

If the attack still persists, inhalations of chloroform or of ether should be used, and these inhalations may be continued for hours if necessary. In the meantime an enema may be given consisting of:

Chloral hydr., 1 gramme.
Tinct. moschi, gtt. xx.
Aquæ, 50 grammes.

This should be administered in two doses by means of a glass syringe. If after this treatment the attack still continues, a mustard-bath should be prepared at a temperature of 38° C., into which the child must be immersed. This will produce fluxation to the skin, and diminish the circulatory troubles which always accompany eclampsia. When the paroxysms have diminished, and the child is able to swallow, the following formula should be prepared:

℞ Potass. brom., 1 gramme.
Moschi, .10 gramme.
Aq. "cherry-laurel," 15 grammes.
Syr. codeine, 5 grammes.
Syr. flor. auran., 30 grammes.
Julip. mucil., 100 grammes.

Of this a coffeespoonful may be taken every fifteen or thirty minutes, or every hour, according to the intensity of the spasm. Should the attack still continue, a vesicant three centimetres by six should be applied to the nucha, and allowed to remain three hours; the wound should then be dressed with starch-poultices or other suitable dressings. Should the eclampsia be due to uræmia, the only remedy which will act rapidly and sufficiently is bleeding. In children two to three years of age, this may be accomplished by placing a leech behind each ear.

PERNICIOUS ANÆMIA.—That pernicious anæmia is one of the most obscure diseases is due not only to the short time it has been studied but, to a greater degree, to the variety of its symptoms. From the diversity of these in different cases, it is difficult to recognize the type, and until this is done, the question as to whether pernicious anæmia is really an independent disease or not must remain an open one. At present the mass of testimony, or, at least, of opinion, tends to the belief that it is an independent disease, but with a varying etiology; and as the latter factor is studied the disease can be divided into cases with and cases without a known cause. In time this will probably tend to lessen the number of cases described as essential anæmias.

Before that, much study must be devoted to single symptoms and defining their relation to the disease. The difficulty of such a study is illustrated by a recent paper by Trechsel, on the "Etiology of Progressive Pernicious Anæmia" (Rev. med. de la Suisse Romande, No. 6, 1888), which contains a very good account of the disease and the discussion of a case under the author's observation, which he considers as presenting symptoms of locomotor ataxia. The case was that of a young woman who became anæmic during pregnancy, and was delivered normally and without much hemorrhage, but never recovered strength; her appetite was lost, vomiting occurred frequently and the patient so lost strength that she could not walk. The knee-jerk was diminished, as was the muscular sense and also, though to a less degree, the cutaneous sensibility. Toward the end, lightning pains came on. There was no autopsy.

In citing this case as one of tabes, Trechsel says that Lichtheim has reported two similar cases, in which degeneration of the posterior columns of the spinal cord was found, and he states his belief that there was a fatty degeneration of these columns similar to that found in other organs in pernicious anæmia. He admits, however, that Lichtheim did not pronounce upon that point; and it seems to us a mistake on his part that he did not follow that acute clinician's example; for there is evidently little ground, from the clinical history as detailed, to warrant the diagnosis of tabes. The knee-jerk was diminished, but not absent, and we learn nothing about the pupils, ataxia or Romberg's symptom. The hæmoglobinometer estimation is useless as bearing no diagnosis of pernicious anæmia, a fact of which the writer appears to be ignorant, if we may judge from his remarks on the diagnosis. He says that the hæmoglobin "seems to be in proportion to the red corpuscles," a statement inconsistent with the facts, as the relative increase of hæmoglobin above the proportion of the corpuscles is one of the most marked characteristics of this form of anæmia. Thus it seems doubtful that Trechsel's

case was really one of pernicious anæmia; so that our knowledge of the disease is no greater than before.

To return to tabes, even more marked cases than this have been reported, in which no lesion at all in the cord could be made out post mortem. It is difficult to understand, too, how or why the cause of the fatty degeneration of the other organs, presumably anæmia, could produce such systemic degeneration as that characteristic of tabes.—*Med. News.*

The Treatment of Flatulent Dyspepsia.—Pepper, in a clinical lecture, stated that flatulence may result from the excessive formation of gas. Under these circumstances, such remedies as sulphurous acid, which is a powerful antiseptic, will be found useful. It may be given alone or combined with small doses of strychnia. He prescribed as follows:

℞ Acidi sulphurosi, ʒ iss vel ʒ ij.
Strych. sulph., gr. ss.
Tr. card. comp., ℥ ss.
Aquam, ad ℥ iv.
Sig.—One drachm after meals, in water.

You may resort to a different class of remedies and give creasote. This is a local stimulant to the stomach, and in atonic cases is of service. It is at the same time a powerful antiseptic and anti-fermentative agent. Creasote is best given one-half or one hour after meals, when the process of fermentation is about beginning. At this time the gastric digestion should have passed through the acid stage, and the contents of the stomach should be neutral or alkaline. Given at this time, the creasote may be advantageously combined with an alkali, as sodium of bicarbonate.

℞ Creasote, gtt. x.
Sodii bicarb., ʒ ij.
Pulv. acaciæ, q. s.
Aquæ, ℥ v.
Sig.—Two drachms one hour after meals.

In place of the sodium bicarbonate in the above formula the subnitrate of bismuth may be employed.

If it is recognized that there is not only a state of atony with a tendency to fermentation, but that there is also a deficiency of gastric power, pepsin may be given. Pepsin is best taken in acid mixtures, and should be given at the acid stage of the digestion. At the same time, if the administration of the drug is postponed for a short time after meals, it comes at a time when the power of the gastric juice is about exhausted.

℞ Pepsin. fort., ʒ j.
Creasot., gtt. x.
Bis. sub. carb., ʒ ijss.
M. Et. ft. pulv. No. xxx.

One of these powders, in a small gelatine capsule, can be given one hour after each meal.

Again, in this same line of thought, we have agents, like powdered charcoal, which act as absorbents of the gases, and are, at the same time, anti-putrefactive and anti-fermentative in their action. Powdered charcoal, with soda or bismuth, may be given a couple of hours after meals, and in the class of cases of which I have been speaking, may afford a great deal of temporary relief. When charcoal is given, the patient should be informed that it will cause blackening of the stools.—*The Polyclinic.*

Effect of Ergot on the Involution of the Uterus.—Some experiments have recently been made by Drs. Herman and O. C. Fowler, and reported to the Obstetrical Society of London, by which the authors sought to ascertain the effect of prolonged administration of ergot on the involution of the puerperal uterus.* To determine whether the medicine had any action or not, they gave an ergot mixture to one set of patients, fifty-eight in number, in repeated doses daily for a fortnight after labor. To another set, sixty-eight in number, only a single dose of ergot was given after labor and no more. In both sets of patients they measured the heighth of the uterus above the pubes on successive days of the lying-in period. They found that in the cases treated by the continuoue administration of ergot the uterus diminished in size more rapidly than in those in which one dose only was given. They compared the two sets of cases as to the duration of the lochial discharge, but on this they did not find that the ergot treatment produced any appreciable effect.

At the same meeting Dr. Bloxall referred to two sets of cases occurring in his Lying-in Hospital, each having to do with one hundred patients. Every alternate patient admitted to the hospital was given a mixture three times a day containing fifteen minims of liquid extract of ergot. This was kept up during the last three days of the lying-in. The two series of observations were carried on simultaneously. In the second series the routine administration of the ergot was omitted. By contrasting the two series of cases, Dr. Bloxall concludes that the practice of giving ergot during the three days following delivery tends to prevent the formation of clots, and to hasten their expulsion, and to diminish the frequency, intensity and duration of the after-pains. That if omitted at first, but given afterwards, the ergot mixture tends to promote the expulsion of the clots and relieve after-pains.

Dr. Dakin at the same meeting reported some observations which seemed contradictory to the conclusions at which Drs. Herman, Fowler and Bloxall had arrived, and claimed that the results of his studies went to show that the continuous use of ergot, by keeping up a tonic state of contraction instead of allowing normal alternate contraction and relaxation, would favor retention of clots, and hinder rather than help the normal process of involution.—*Boston Med. and Surg. Jour.*

Malarial Fever in Children.—The author claims that intermittent and remittent fevers of malarial origin are not rare diseases in children, but they present symptoms different from those seen in the same diseases in the adult and which might lead to a wrong diagnosis.

Intermittent fever in children under two years is usually quotidian; beyond this age,

*Journal of Obstetrics, May, 1887.

tertian. In young infants the paroxysm has three stages; a baby rarely shakes, instead lies unusually quiet, its lips and fingers livid, other portions pale, hands and feet cold, seemingly on the verge of collapse. Every case is not as severe as this, often the fever being the first symptom. In the second stage the pulse runs up to 120 or 140, and the temperature to 103° or even 108° F. The face is flushed or red spots appear on the cheeks, the skin is dry, there is great thirst, and the child suffers pain in the head and limbs. This stage lasts from two to eight hours. The third or sweating stage is not pronounced, and may not exist at all. In the interval the child appears well except for a slight weariness. The author places great stress upon abdominal pain as a symptom of both the intermittent and remittent varieties. Splenic enlargement is present in some cases, but not as frequently as most writers assert. "Ague-cake" is found in old cases that have not had proper care. Eclampsia may occur as a complication.

In the remittent variety the chill is often wanting, the child merely complaining of feeling cold. The fever soon follows, becoming continuous, with slight exacerbations in the latter part of the day, and accompanied by pain in the stomach, nausea, and often vomiting, the vomited matter being more or less bilious, tongue coated, breath foul, bowels constipated, urine scanty and high colored, and great thirst, while anorexia and a dry, hacking cough are common symptoms,—in severe cases, delirium. The gastric symptoms may persist for days. The author after a long experience advises the following treatment: a small dose of calomel with a few grains of soda, followed by castor oil or rhubarb and magnesia. After the gastric symptoms are relieved he gives quinine, proportioning the dose to the age,—for a child two years old, one grain of the sulphate three or four times a day. Other symptoms are treated as they arise, restlessness or insomnia with bromide of sodium or small doses of Dover's powder.—DODGE in *Phil. Med. Register*, May 26, 1888.

ON THE VALUE OF SALOL IN THE TREATMENT OF ACUTE RHEUMATISM.—Dr. J. Rose Bradford, of University College Hospital, publishes the results of sixteen cases of rheumatic fever treated with salol.

The cases were all of average severity; temperature from 101° to 103°. In two of the cases, pericarditis and endocarditis resulted; in one of them there was an attack of hyperpyrexia temperature reaching 110°) before the pericarditis. The salol was given in the most severe cases in doses of ten grains every hour till the temperature came down; in cases of moderate severity, the dose was ten grains every hour till the temperature came down; in cases of moderate severity, the dose was ten grains every two, three or four hours. It was sometimes given in milk, sometimes in plain water, sometimes in soda-water

Dr. Bradford's conclusions are as follows: 1. As an antipyretic, salol is decidedly efficacious in rheumatic fever, its use being followed by a rapid fall of temperature within twenty-four hours from the commencement of its administration. To produce this rapid fall, as much as ten grains every hour should be given. It does not, however, prove to be quite as reliable, as an antipyretic, as salicylate of soda. 2. It is inferior to salicylate of soda in relieving the joint pains. 3. Cases of relapse are just as likely to occur after salol, as after salicylate of soda. 4. Salol is superior to salicylate of soda in not producing, to as great an extent, the deafness, noises in the head, etc., so common with the latter drug. Salol is better tolerated by the stomach than salicylate of soda, nor is it so likely as the latter to produce unpleasant toxic symptoms. Its administration is sometimes attended with carboluria: this is explained by its chemical composition, salol being a compound of salicylic acid and phenyl.

Dr. Bradford adds, in conclusion, that the results obtained with salol are simply those that would be expected on the supposion that it owes its activity solely to the salicylic acid it contains. The fact that deafness, noises in the head, etc., are not so common after its use, is simply because less salicylic acid is given. Its one advantage appears to be that its taste is more pleasant; but this is of comparatively small moment, as the taste of sodium salicylate can be effectively covered. The latter, moreover, has been successful in cases where salol has failed, and has proved more effective in relieving the joint pains.—*Boston Med. and Surg. Jour.*

HYPODERMIC INJECTIONS OF ANTISEPTICS.—The Paris correspondent of the British Medical Journal reports that, according to Dr. Reusse, carbolic acid, prepared especially for hypodermic use, is easily injected, without pain swelling, or lesion, even in a strong dose of one in five. Nevertheless, some phthisical patients have been known to give up this treatment on account of the pain it causes. In one case, Dr. Reusse saw, a woman into whose breasts carbolized vaseline had been injected: six months afterwards her breasts still appeared like bags of nuts, and her pulmonary condition had not been ameliorated, because the antiseptic, enveloped in the vaseline and encysted in the tissue of the gland, had not penetrated into the blood. MM. Arnozan, Pitres, etc., have described cases of gangrene, neuritis, and paralysis caused by the destruction of the nervous filaments, after injections of chloroform and of ether. Chloroform and ether thus employed are but instruments of torture. Dr. Reusse has proposed paraldehyde, which, prepared at twenty per cent., is a useful antispasmodic and an energetic antisyncopal remedy, giving but slight pain and causing no lesions. Eucalyptol has been employed, combined with petroleum vaseline, but the result has been far from satisfactory. In fact, the vaseline covers the medicinal agent and almost prevents its acting at all; for this substance does not saponify in our organisms, and therefore cannot be assimilated even by the stomach. Besides it may become poisonous; being composed of variable hydrocarburets, its typical chemical formula is Cn Hn and it requires only one equivalent of the nitrogen of our tissues to combine with it and form hydrocyanic acid, NC_2H. This may have been the cause of some cardiac and pulmonary accidents recently observed. Many antiseptics, however, may be mixed with vegetable oils, and become capable of being injected. Eucalyptol is, in this manner, mixed with fine olive

oil, injected in cases of phthisis at the Hôpital Laennec with great success.

SALINE PURGATIVES IN THE TREATMENT OF TYPHLITIS AND PERITONITIS. — In the British Medical Journal, May, 1888, p. 1112, Dr. Suckling draws attention to the value of saline purgatives in the treatment of peritonitis and typhlitis. At a recent meeting of the Midland Medical Society the author showed a patient who had recovered from an undoubted attack of acute peritonitis, secondary to typhlitis. In this case opium and belladonna failed to give relief, while the administration of sulphate of magnesium and sulphate of sodium in half-drachm doses, with ten minims of tincture of belladonna, every four hours was quickly followed by improvement, the motions, at first liquid, becoming more and more solid till normal stools were passed. In another case the author treated a patient suffering from severe typhlitis with the same mixture with great relief, but after a week the bowels failed to act and all the signs of peritonitis were present. The patient was very prostrate, having been allowed only a pint of peptonized milk and a pint of beef-tea a day; he was given three ounces of whisky, and the next morning he passed an enormous liquid motion containing scybala. The stimulant was continued and another pint of milk was allowed daily. The patient continued to pass large motions with scybala, and the signs of fluid in the peritoneal cavity soon disappeared. In cases of typhlitis or peritonitis due to fæcal retention, saline purgatives are of great value if enemata fail to act. In moderate doses they do not cause peristalsis, and are exceedingly useful in washing away scybala. Should any accumulation of fluid be detected in the abdomen stimulants should be given. (Mr. Lawson Tait asserts that saline purgatives are more useful in preventing peritonitis after ovariotomy than antiseptics.)—*London Med. Rec.*

COMPARATIVE VALUE OF PEPSINS.—At the meeting of the New York Academy of Medicine, June 27, 1888, Dr. George B. Flower reported some experiments with different specimens of pepsin. No pure pepsin is in use, he said. The various specimens in the market are prepared from the mucous membrane of the hog's stomach, with varying degrees of care and varying results as to purity. The mucous membrane is first scraped, and, with the pepsin, the mucus of the glands is also removed. A glycerin extract is then made, the pepsin is precipitated, but as it precipitates, the mucus precipitates also. New extracts are then made, and new precipitates formed; and, finally, the extract is dried, the product being commercial pepsin.

In the experiments which were made, thirteen different specimens, by as many manufacturers, were taken, one grain of each being used for the test. Each specimen was placed in a ten-ounce bottle, which also contained eight ounces of a one-half per cent. solution of hydrochloric acid, and twelve hundred grains of egg albumen, which was to be digested. Each bottle was kept at a temperature of 100° F., for six hours, being agitated every half hour, and then allowed to cool. An additional bottle containing the same quantity of albumen and acidulated water, but no pepsin, was placed by the side of the others, for the purpose of comparison with those in which digestion was being accomplished. The results varied greatly. All the albumen was digested, and a clear solution obtained by the pepsin of Parke, Davis & Co. That of Fairchild Bros. & Foster and that of Hawley, were nearly as good. Most of the other specimens showed very weak digestive properties.

THE MECHANICAL TREATMENT OF ERYSIPELAS.—Instigated by the results which Barwell, Freer and Otto obtained by painting with white lead the skin at the borders of erysipelatous inflammations, Wölfler (Mitth. d. Ver. d. Aertze Steiermarks) undertook some experiments with the mechanical treatment of erysipelas. Concluding that merely painting the skin with varnish—to prevent the admission of air necessary to the life of the coccus of erysipelas—did not suffice to limit the extension of the inflammation, he attempted the simultaneous application of a compressing band, by means of water-tight material and a bandage, and by means of gutta-percha paper prepared with chloroform (traumaticin), but with varying results. Guided by the idea that the application of the bandages was operative less by exclusion of air than by mere mechanical compression, he concluded to replace the bandages and strips of traumaticin by simple strips of adhesive plaster about an inch wide. In four cases thus treated, the author obtained good results; in no case did the inflammation extend beyond the strips of plaster; while in twenty-four cases treated with traumaticin, extension took place in five. The strips must be applied to the healthy skin at the borders of the inflamed area. In severe cases of erysipelas of the head, the hair must be removed; in advanced facial erysipelas, the strips should be applied about the neck. The author ascribes the results of the method, which commends itself for its simplicity and convenience, to the compression, which interposes a greater obstacle to the spread and development of the coccus of erysipelas than the ordinary antiseptic or antacid methods hitherto in vogue.—*Wiener medizin. Pr.*, July 1, 1888.

A VALUABLE REMEDY FOR CHRONIC DIARRHŒA.—A correspondent of The Medical News writes to that journal as follows: Sir—I think you would do a service if you would call attention in your journal to a valuable remedy for chronic diarrhœa. Many years ago I suffered severely from that trouble; I considered it incurable. Being in Paris, one of the best physicians there assured me it could be cured by a diet of racahout, and it was. Afterward here I found one could not get the acorn meal that forms the active part, but knowing that its usefulness must depend on the tannin it contains, I tried substituting it as follows:

Powdered chocolate, pure, ½ lb.
Rice flour, ½ lb.
Powdered sugar, ½ lb.
Tannin, ¼ oz. (120 grs.)

The tannin, or the rest, separately, have little effect. Together they restore the tone of the

alimentary canal and nourish as well as cure. One thing is essential, that is long cooking, not less than half an hour. If simply boiled a few minutes, the harsh taste of the tannin is very strong; with a good half hour's cooking, it disappears wholly—it is impossible to distinguish the medicine from ordinary broma. I think this has something to do with its curative powers and with the ease of digestion by the more irritable stomach. The remedy is too valuable not to be more widely known. The amount to be taken is a teacupful morning and evening at meals.

TREATMENT OF SPERMATORRHŒA. — Dr. Wm. Murrell, in a lecture recently delivered in the Westminster Hospital course of materia medica and therapeutics, (*Med. Circ.*), states that there are few better remedies than the bromides for spermatorrhœa, or wet dreams. Nearly all the concoctions so largely advertised in the daily press for this affection contain one one or more of the bromides. The direction which accompany these nostrums are probably not without value. It is generally said that while the patient is taking the medicine he should sleep on a hard bed with little bedclothes, his hours of sleep are to be strictly limited, and he should at once get up when called in the morning. A cold bath is to be taken daily, and the patient is to bathe his testicles in cold water every night when going to bed, although this latter plan has been accused of a tendency to excite a reactive hyperæmia of the parts which is prejudicial to their physiological repose. He should take little stimulants and no grog at bed-time. He must be careful in the choice of literature, and should especially avoid reading quack works. He should take plenty of exercise, go in for cricket, football, or join a gymnasium, or the volunteers. A commonly recommended auxiliary mode of treatment is to tie a reel round the loins, so that if the patient lies on the back he is uncomfortable, and turns over on the side, it being found that wet dreams occur more commonly in the supine position.

TREATMENT OF INSECT BITES.—The chief drawback to summer is the friendly insect. He converts peace into discomfort, ease into pain, and, too frequently, piety into profanity. Wire-nettings, gauze-screens and mosquito-canopies he laughs at, and scorns pursuers and pursuit. Yet a little aid from chemical science destroys his career of uselessness. To drive and keep flies and mosquitoes from a room may be accomplished by sprinkling an ounce of carbolic acid, dissolved in a quart of warm water, upon the floor and furniture. A rose-syringe or a large atomizer affords the best means of sprinkling. If the odor of the carbolic acid is unpleasant, oil of pennyroyal is the next best "insectifuge." Below this are the oils of peppermint and thyme. Carbolated vaseline or oil of pennyroyal rubbed upon the face and hans will keep away the little pests. To remove the pain of mosquito-bites, strong ammonia should be applied to the puncture. Ether dropped or rubbed on the inflamed surface evaporates rapidly and generally stops the smarting. Nearly all the essential oils used in toothache are of great value in this regard. Creasote, oil of cloves, cinnamon, pennyroyal, peppermint and thyme, laudanum and petroleum-ether readily give great relief.—*American Analyst.*

HYPODERMATIC USE OF THE ALKALOIDS.—The Paris correspondent of the N. Y. Medical Journal writes: The rapidity of the absorption of alkaloids by the subcutaneous tissue is not at all well known, and M. Chouppe has been making some interesting studies in regard to this matter. It is of the utmost importance that we should know the exact dose of drugs that we use by hypodermic methods. From the experiments made it is certain that, when the usual doses of the different alkaloids, dissolved in equal amounts of liquid, are injected, they act with quite a difference as to the time it takes to produce an effect on the general circulation. Morphine, for instance, takes as much as from six or seven minutes to produce its sedative action, while apomorphine acts in four minutes. Some of these facts are well known, but it is very important that we should know more exactly than we do the precise time it takes to produce the therapeutic effect of all the alkaloids given hypodermically; so that we may not fall into the rather common error of giving fresh doses before the one first given has had time to act.

NUTRIENT AND SEDATIVE ENEMA.—The following is recommended as valuable for a nutrient and sedative enema:

℞ Bouillon of beef, ℥ iij ʒ j.
Eggs, j.
Bordeaux wine, ʒ vj gtt. xv.
Sodium bicarbonate, gr. viij.
Tincture of opium, gtt. iv.
Chloride of sodium, gr. iij.
Peptone, ʒ iv.
M.

—*Révue de Thérapeutique.*

CHLORIDE OF METHYL SPRAY IN CHOREA, ETC. — Lubinscki, of Warsaw, having recognized the use of the ether spray along the spine in the treatment of chorea, M. Huchard tried the spray of chloride of methyl in the same malady. The patient improved considerably in a few hours. The case was not conclusive, because the patient was inclined to be hysterical, but he has also employed the spray in certain cases of spinal irritation, due to hyperæsthesia or anæmia of the cord. In several of these cases the results were satisfactory. He suggests that this treament might be of service in cases of spino-medullary disease, such as exophthalmic goître.

THE TREATMENT OF BLEEDING FROM THE NOSE.—Wade recommends the expedient of Hutchinson. The hands and feet of the patient are placed in water as hot as can be borne. This will check the most obstinate epistaxis, without any ill consequences.—*Deutsche med. Wochenschr.*, July 19.

The Medical Age.

Vol. VI. DETROIT, SEPTEMBER 10, 1888. No. 17.

Original Articles.

FRACTURES OF THE FEMUR.

A CLINICAL LECTURE BY HAL C. WYMAN, M.D.*

Fractures of the femur have been the cause of more controversy among surgeons than any other fractures. There have long been differences of opinion as to the degree of shortening which must necessarily follow a fracture of this bone; some acknowledged surgical authorities declaring that there must always be a shortening after a fracture of the shaft of the femur, while others declare that if the fractured bones are properly adjusted and treated, there need be no shortening whatever. Perhaps both are right. It may be that the character of the fracture has a great deal to do with the result.

I have two cases to show you this morning. The first case, that of a young man, twenty-three years of age, who was thrown from a wagon, falling in such a way that two of the wheels passed over his right thigh, producing compound, comminuted, fracture of the thigh bone. By the term compound-fracture I mean a fracture in which the soft parts are divided, as well as the bone; and by the term "comminuted," as applied to fractures, I mean a case where the bone is broken into many fragments. It is not fair to presume that a case in which five inches of the shaft of the femur, about its middle, has been ground into small fragments beneath the wheels of a wagon running over hard pavement, would unite without any deformity of the bone. In other words, it is not fair to presume that nature would repair such an extensive injury to the tissues without producing some distortion.

Now, this case we dressed first in the long splint of LISTON—sometimes called that of DESSAULT. This long splint is applied thus: We first put upon the leg an adhesive plaster, in the form of a loop extending under the instep in the form of a stirrup, while a strip extends up on either side of the leg, about a foot. It is held in position by a firm roller bandage. To the loop, or stirrup, portion of the strap, we fasten a piece of one-half inch rubber tubing, which is made taut and tied through the notches in the end of the long splint, which projects about a foot beyond the foot of the patient. The upper end of the splint is secured in position by a perineal band, which is carefully padded to prevent its excoriating the perineum, against which it exerts counter-pressure. Then through the long splint, fixed in this way, the rubber cord being made taut, extension of any desired degree is maintained. Then a roller bandage is carried loosely around the limb and over the long splint. I forgot to state that before applying the long splint, we first applied what are called coaptation splints, of heavy pastboard, about fifteen inches long and two inches wide, around the thigh. A series of these, four in number, two on the outer, and two on the inner and lower portion of the thigh were applied over the seat of fracture and were secured by a roller bandage. Previous to this, however, the loose fragments of bone which were likely to spread through the tissues in the process of repair were carefully picked out and removed from the wound with a forceps. Then a drainage tube was inserted so that all fluids that might accumulate in the wound could be thoroughly drained away. The injured member was then enveloped in dried cotton and the coaptation splints and secured with a roller bandage as before mentioned. Plasters were then applied to the leg; and the long splint with the rubber cord and perineal band for extension and counter-extension. Care was taken to arrange the dressings in such a way that access is easily had to the wound in the thigh, so that it may be cleaned and kept in a healthy condition. It was intended to make this a permanent dressing. By and by, after a few days, as the inflammatory action subsides, and the reparative processes become more thoroughly established, we will remove these long splints and this perineal band, on account of the inconvenience which it constantly occasions this particular patient. I want to be particular to say that a splint or a system of dressing which is adapted to one fracture may not by any means be adapted to all fractures. This man does not tolerate long splints well; he is restless—nervous under the constant pulling of the elastic cord and the continual pressure of the perineal band. Another man, of different organization, different temperament, might fare differently under the

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same treatment; and for such a man this treatment might be the best that could be carried out, but in the present case we will change this dressing for the reasons just mentioned, and put the limb in a plaster of Paris bandage, taking pains to have the limb fully extended at the time the bandage is applied, and carrying the plaster well up on to the perineum, having the pressure of the cotton so finely adjusted that it will maintain the desired degree of extension throughout the process of cure. We will also, when we come to apply the plaster, make a fenestrum or window through the plaster over the wound in the thigh, through which the dressings may be changed.

At first glance the inexperienced observer might think that the plaster of Paris dressing would not maintain a sufficient degree of extension to prevent shortening while the bone in this case unites. In reply to that idea, I want to say that I do not believe any degree of extension which could be applied to the limb would prevent a certain amount of shortening while new bone was thrown out to fill in the gap caused by the removal of the minute fragments. It is a fact that when bones are carefully divided in experimentation, and are pulled apart so that a considerable interval exists between them, and the muscles which envelope them carefully divided so that there is no contractional force, the bony formation which is thrown out to repair the injured bone will not reach sufficiently far beyond the point of fracture to extend or increase the length of the broken bone. When broken bones unite the tendency is for them to become shorter than before they were broken, and when a bone has been so badly crushed that five inches of its extent is completely broken up, it is only reasonable to expect that a very considerable degree of shortening will be the consequence of the union of the divided bones.

I have already alluded to the use of plaster-of-Paris dressing, and I want to say simply this: that much art can be acquired in the use of plaster, if the cotton is evenly applied, and cotton should always be applied next to the skin, and a roller bandage should be rolled singly and evenly over that. The plaster may be adjusted with such deftness and firmness and uniformity of pressure that it will be capable of restraining all muscular action. If you think for a moment of the circumstances which occur in muscular contraction, you will realize that with the shortening of a muscle incident to its contraction it increases its transverse diameter. For example, a muscle like the biceps or the quadriceps extensor of the thigh will measure considerably more in its transverse diameter while in a state of contraction than it does in a state of relaxation; and if a plaster of Paris bandage be properly applied the pressure which will be exerted by it will be so even and uniform that it will prevent an increased thickness of the quadriceps extensor and a consequent shortening of the muscle; and without shortening of the muscle there can be no movements of the fractured bones. We have thus in plaster one of the most important aids in preventing that shortening of broken bones which results from muscular contraction. A great many surgeons apply the plaster-of-Paris primarily. They will dress all compound fractures with it.

They apply the plaster over all and await the development of symptoms—rise of temperature, quick pulse, pain—to indicate the presence of pus, and then make a fenestrum or hole through the plaster-of-Paris bandage, by means of which the discharge may escape. But occasionally symptoms indicative of the presence of fluids or the formation of pus are unreliable. The presence of pus is not always indicated by pain, or a rise of temperature; and instances are on record where effusion has painlessly occurred in a limb wrapped in the firm unyielding plaster-of-Paris dressing; and with this effusion there has come an obstruction of the circulation which has resulted in gangrene. I have seen a little finger the seat of dry gangrene as the result of a simple plaster-of-Paris bandage put on for the purpose of holding in position the bones of the first and second phalanx after they had been reduced because of dislocation. The firm, uniform pressure of the bandage prevents that access of fluids to the parts which is necessary for the repair of the damage. In my judgment, it is better to defer the application of the unyielding dressing until the first swelling has disappeared; until nature has made her first effort to repair the injury. After that, no better dressing can be applied.

CASE 2.—This little boy, 13 years of age, while playing about a barn was struck by the heavy door, which a gust of wind blew from its hinges, producing an oblique fracture of the lower third of the thigh. This fracture, you see, is now dressed with plaster-of-Paris. The boy, as you will notice, has unusually fine muscular development. The injured limb, as you will also notice, is distorted by a deformity of the lower third of the tibia and fibula. You will notice that the bones of the leg are bent forward. Inquiry reveals the fact that this leg was fractured three years ago, and that subsequent to the union of the fracture the bones began to bend under the weight of the body. As the boy improved in health he used the limb, and it inclined forward in the manner that you see, giving rise to a very serious deformity, a permanent shortening of the limb of a little more than two inches.

At the time the present injury was received a careful examination was made of both the sound and the injured femurs; and we judged

that there was no congenital defect in either of them. Now, as you look at the plaster dressing, this bulging indicates the lower border of the patella. By comparing it with the patella of the sound limb, we easily decide that there is at present no shortening of the femur; but owing to the fact that the fracture was oblique and the line where union must take place widely extended, it would not be strange if the same process of softening should take place in the new tissue thrown out to weld together the broken fragments, as took place, under similar conditions, when the leg was first fractured; and to guard against that we shall keep this limb carefully enveloped in plaster and keep the boy off the limb for several months. We are led to this step because we believe that there is some peculiarity in the boy's disposition or nature which impairs the usual process by which bones are united. No better evidence of the existence of such a peculiarity of organization could be asked for than the deformity which we find in the leg; and when we recall the fact that at the time the fracture was produced, and subsequently, the most careful surgical appliances, as far as splints, and dressings are concerned, and rest in bed were imposed, yet, after the physician had supposed that the bones were firmly united, and the eight weeks' time which commonly elapses before persons with fractures are allowed to use the injured limbs had elapsed, and the patient had begun to walk upon it, then the softening seemed to take place and the bone began to bend forward, producing the deformity which you see. In this case too a long splint was used for several days, not for the same reasons that it was used in the other case, but for fear that the unusual muscular development which you see that this patient enjoys might become excited and disturb the rest of the broken fragments after they had been carefully adjusted. However, as soon as a few days had elapsed and we found that the boy had good control of his muscular system and that there was very little twitching or jerking of the muscles of the thigh, we took off the firm splint and applied the plaster which you see.

These two cases serve well to illustrate the fact that fractures seldom heal and make the limb as good as it was in the first place. They show, too, that change may take place in a bone which has been broken long after it is supposed to be sound and unyielding. These changes may be so little in character that ordinary surgical skill will not detect them, and when they occur the surgeon should not be held responsible. A green stick fracture of the leg is sometimes mistaken for no fracture and the patient sometimes gets a deformity in consequence of walking on the broken leg too soon, but in the case of the boy I have just shown you, the history shows that he had a simple transverse fracture, and that the deformity was due to conditions which developed after the repair was supposed to be complete.

CONCLUSIONS.

1. Fractures of femur may heal without shortening, but are not likely to.
2. Always turn the toe a little in when dressing a broken femur, because of the great tendency to eversion of the toe after fractures of the thigh.
3. Don't forget when using plaster apparatus that the even pressure causes wasting of the limb, a shrinkage which permits movement of the broken bones inside the plaster cast.
4. Guard against shrinkage by removing the cast or cutting it open lengthwise, filling with cotton and tying it tighter.

SYRUP TRIFOLIUM COMPOUND.

BY HIRAM BARBER, M. D., PHYSICIAN IN CHARGE OF SING SING PRISON, N. Y.

Something over a year ago I received a case of syrup trifolium compound, my attention having been directed to the remedy by reading an article by PROF. E. F. RUSH, published in the Chicago Medical Times, in October, 1885. Having had professional charge of Sing Sing Prison for eight years, with a daily average, each year, of more than 1,500 convicts, I have had opportunities to become familiar with the varied forms of syphilis in the institution; and when I add that seven-tenths of these convicts are furnished by the city of New York, it will not be doubted that my opportunities have been abundant in this direction.

From a list of numerous cases which I have treated during the past twelve months, with a view to fully and fairly trying the virtues of the remedy referred to, I have selected four of a well-defined and unmistakable character, and I take great pleasure in furnishing you with a synopsis of the treatment in each case, and, I am free to say, with results entirely satisfactory.

Case 1.—J. R., laborer, aged 22. Before coming to the institution, this man had been treated for gonorrhœa, from which he appeared to be gradually recovering. There was still some stricture, and the sound was used twice a week. I gave him iod. potass in five-grain doses three times a day, and in three weeks the active symptoms gradually subsided.

About three months subsequently he came to the Dispensary, apparently in great distress. I immediately placed him in the hospital. Upon examination, I found him suffering great pain in the region of the bladder, extending upwards to the kidneys. The inguinal glands, on both sides, were inflamed and enlarged. There was

great difficulty in voiding urine, the skin was hot and dry, and pulse 98. Evacuated bowels with podophyllin and rhei, gave him small doses of aconite every two hours, and used catheter three times a day. In three days skin became cool and moist, pulse fell to 80, with stricture much less intense. I then commenced giving him syr. trifol. comp., one drachm every four hours, with powder of Dov. and camph., at night. At the end of seven days I noticed decided improvement. Pulse 78, tongue clean and moist, normal discharge from bowels, urine tolerably free.

The tumefaction in groins advanced to suppuration and in due time was relieved by puncture. Used sound once a day for another week at which time stricture disappeared. Continued syr. trif. comp., same doses, twice a day. At the end of two months he was discharged cured.

Case 2.—J. M., age 52, was received in the Institution in May, 1887. He had previously been under treatment for syphilis in New York. My attention was directed to him about November 1st following. He came to the dispensary complaining of pain in small of back, shooting down into the bladder and extending to the perineum. The pains were greatly aggravated in voiding urine, which was attended with much difficulty. I placed him in hospital, and upon examination discovered stricture in lower third urethra, enlargement of inguinal glands, and considerable tumefaction and tenderness of perineum. There was a good deal of constitutional disturbance, liver torpid with constipation, and urine high-colored and small in quantity. Administered mercury and ipecac in small doses every four hours, alternately with aconite. Local application of tinc. iod. over the kidneys and hop fomentations to inguinal and perineal regions, and used catheter every six hours. In thirty-six hours constipation gradully yielded to moderate evacuations. Pains in back became less aggravating, and were greatly reduced in region of the bladder. Swelling in groins less, but tumefaction of perineum greatly increased. I then commenced the administration of syr. trif. comp. three times a day, with pill of gum camph. 1 gr., opii pulv. $\frac{1}{4}$ gr., and ipecac $\frac{1}{8}$ gr., at night. In seven days a well-defined abscess was formed, involving the entire perineal region. This was duly punctured, and the discharge was profuse and continued. Considerable muscular atrophy and debility followed. Syr. trif. comp. was continued, alternated with elixir calisaya and iron three times a day. Under this treatment the patient gradually improved, and in four months was discharged from the hospital cured.

Case 3.—J. D., age 42; contracted syphilis in July, 1886; came to the institution in January, 1888. The lesions in this case were mostly upon the surface of the body, comprising well-marked eruptions of a syphilitic character, extending from head to feet. There was also considerable torpidity of the liver with constipation, urine high-colored and small in quantity. He complained of almost constant pain over the eyes, and could not sleep. I gave him small doses of mercury and ipecac every four hours, with ol. terebinth., 20 drops in emulsion night and morning. This treatment was continued four days, during which time the bowels became softened, with moderate biliary evacuations, skin became cool and moist, and urine more copious with better color. I then gave him iod. potass. for ten days. During this time the patient complained of his throat, and appeared to swallow with some diffiulty. An examination disclosed syphilitic discoloration and tumefaction of soft palate and fauces. Discontinued iod. potass., and gave him syr. trif. comp. four times a day, with gargle of chlorate potass. and mur. tinc. iron used locally. In seven days the throat was greatly improved. Meantime an ulcer had made its appearance upon left side of the tongue, which disappeared in due time under the application of lunar caustic twice a day. In six weeks the eruptions upon the surface of the body were materially reduced, and at the end of three months the patient was discharged cured.

Case 4.—W. C., age 26, driver. This man contracted syphilis in 1885 and had been treated for same previous to his reception in this institution, in 1888. The lesions in this case were prominent and unmistakable, consisting of syphilitic eruptions, pain over the eyes, irritation of mucous membrane of nasal cavities and throat, abrasions on the tongue, complicated with short, dry and rasping cough. No great disturbance of biliary and urinary secretions, but circulation sluggish and appetite poor. Gave him elixir cinchona and cod-liver emulsion alternately three times a day, syrup trifolium compound night and morning, with topical application of hydrastis canadensis to nostrils and throat.

This treatment was continued with unimportant variations for six weeks, with marked success. Meantime, however, the abrasions upon the tongue developed into ulcers, and ulcers were also formed upon lower extremities; appetite good. Discontinued elixir calisaya, gave him syr. trif. comp. every four hours, and continued cod-liver emulsion night and morning. Applied mur. tinc ferri to tongue three times a day, and used ung. iod. comp. upon ulcers on extremities. Under this treatment the patient steadily improved, and, at the expiration of the fourth month, appeared to be entirely well, and was accordingly discharged from hospital.

THE TREATMENT OF ANÆMIA.

BY G. A. WILLIAMS, M. D., BAY CITY, MICH.

With this as in all other morbid conditions, we must remember the three words, "remove the cause," and hence the importance of attending to the surroundings of the patient, and all hygienic measures, before having recourse to any system of medication.

With respect to medicines, I never was in favor of complicated prescriptions; on the contrary, I always like to see prescriptions as simple as possible. As the importance of hygienic measures has been better understood, the dependence upon drugs has lessened, and to-day the intelligent physician may be known by the small amount of medicine which he prescribes and by the large amount of instruction he gives, relative to the nature of the disease and the personal conduct of the patient. Only the most intelligent classes of to-day are beginning to realize that too much faith has been put in medicine. The other classes still feel that the paramount duty of the physician is the selection and administration of drugs. Enlightenment among them must necessarily be slow. They must acquire a better knowledge of disease in general and appreciate the fact that the intrinsic tendency of many diseases is to recovery, and that drugging is not always necessary, even in those diseases which were formerly supposed to tend to a fatal result, unless very active measures were employed. As the intelligent physician advances in years he learns to depend principally upon a correct diagnosis and a proper understanding of the principles of medicine.

Still, in this enlightened age, I have known physicians to prescribe digestylin, nitrate of silver, syrup of hypophosphites and baby tonic all mixed up together, and many others of the most abominable compounds. These mixtures have a peculiar muddy appearance and I doubt, if any set of analytical chemists could even approximate the composition of any of them, neither would they venture to say what change and chemical decomposition would take place. Some physicians seem to prescribe as though they wished to put the whole contents of the pharmacopœia in one prescription, and they would probably expect a specific action from every one of the whole list of remedies. Another point in prescribing is to make all medicines as agreeable as possible. Here is where the homœopathist has grown into favor, not by his "similia similibus," but by appreciating nature, non-interference and by the small amount of medicine given. For introducing this reform among the regular practitioners, the homœopathist is certainly entitled to considerable gratitude from those whose stomachs are no longer over irrigated by the apothecary, and whose veins are no longer under-drained by the phlebotomist. With regard to special medicines in anæmia, iron has always been recommended, but of late years has not been considered so important. I never could see the necessity of it, and I believe there is no more common error in ordinary routine practice, than that connected with the indiscriminate use of iron in all cases of anæmia.

"The physician who invariably gives a mixture containing iron to every anæmic patient, does little or no good in half of the cases, and does harm to a large number. Unless the stomach and intestines are in a condition to assimilate the iron when administered, there is simply added to the intestinal tract, something which can have no effect, excepting to act as an irritant (Canada Prac'r)." The idea in these cases is to nourish the patient, and if we recommend a mixed nourishing diet, we know that it contains all the elements required to build up the various tissues of the body. We have the various artificial foods, which I have always considered unnecessary and unreliable. "We have no end of peptonoids, with coca, peptonoids with celery, cerebro-stimulators, and liquid foods; each teaspoonful of these foods representing a pound of steak, one chop, six eggs, and half a dozen raw oysters, with a loaf of stale bread and the thousand and one compounds which chemical and pharmaceutical ingenuity devise and force upon us daily and hourly, which cover our desks and tables, are thrust upon us by overzealous agents, and even steal upon us through the post. (Ther. Gazette.)" Do not rely upon any of these preparations, but teach the people to prepare food for themselves, in a manner that it may be palatable and digestible as nature intended it for them. So it is with all the unofficinal medicinal compounds. We have abundant evidence to show that they are unreliable, and besides it is unprofessional and unscientific to prescribe them, and as the people acquire the habit of taking them without the advice of a physician, they eventually become detrimental to the community at large.

We have had conversation with men who had been employed where these various compounds are made and they told us that the proprietors of these institutions actually admitted that these preparations were not reliable, and that they were laughing in their sleeves at the physicians for being so easily duped and being induced to use these compounds. What we require in these cases of anæmia is something to rouse up the stomach and promote digestion; then the patients get all the iron they require from their food. Where there is constipation, I very often use cascara sagrada; and when the tongue is coated in emaciated subjects, where the secretions seem to be scanty, I give acid. nit. mur. dil., before

meals. Where there is oppression and flatulence, I give pepsin after meals. I often recommend the light dry wines in these cases. These wines stimulate and tone up the stomach without causing irritation and headache, as is always the case with the stronger alcoholic stimulants. I remember being called to see a woman who was suffering from anæmia. She had been under the treatment of another physician for some time and had taken various preparations of iron without benefit. She had constipation with loss of appetite, and was attempting to nurse a baby, which was a constant source of annoyance to her. I gave her medicine to regulate the bowels and create an appetite,and told her to send the baby away to her mother's house, and in a few days she was quite well, and so it is with thousands of cases that occur in our practice all the time. I did not prescribe iron in this case, for such an idea would have appeared to me as being the most absurd nonsense. Again, when iron is given in diphtheria and erysipelas, the perchloride is always prescribed, which acts not as a tonic, but as a germicide and antiseptic, the effect depending upon the chlorine and not upon the iron.

Ask any young student what should he give in anæmia. He will immediately say, give iron. Years ago, if you had asked a young physician what to do in fevers or in shock from accidents, or in erysipelas, he would say—bleed the patient at once. We live in a progressive age, and the fact that a thing has been, is not, in itself, a sufficient reason for its continuance. If it be wrong to give iron, the fact that it has always been given does not make the practice right, and as conservators of the well-being of humanity, it becomes the physician to question even traditional practices." (MED. AGE). Still, with this reasoning, I have known physicians to give as much as a teaspoonful of tr. of iron every hour to some failing patient with the idea of supporting his strength, as a person might support the elevated railway with an iron pillar. Think of that, and then tell me what you think of our great thinkers. The iodide of iron is certainly beneficial in many cases, but we must not overlook the iodine, which is antiseptic, one of the best of alteratives and has a tendency to stimulate the whole glandular system. Iodine in this form can be much better borne than any other compound of iodine, and can be taken for a long time without injury to the stomach. The peculiar form of anæmia called chlorosis, according to some authorities, has its origin in the nervous system, and I am inclined to agree with this theory. This condition occurs generally in young women of a romantic and sentimental turn of mind. According to the eternal fitness of things, it is always natural for a young woman to have an object of affection; as the vine clingeth to the oak, and the pale geranium pent within the cottage window, yearningly stretcheth to the light its long-stalked leaves.

Disappointments in this respect, naturally produce painful emotions of the mind with perverted action of the nervous system; then follows the perverted action of the various organs and their reaction upon each other. Who of us has not seen young women with all these emotional troubles, and how quickly all aches and pains disappear after having found some one to satisfy their various whims by way of sympathy and companionship.

Of late considerable has been said about fæcal poisoning as a factor in anæmia and chlorosis, and no doubt the same observation holds good with respect to retained excretions in any part of the system. I have sometimes thought that the effect of pot. permang. and binoxide of manganese might depend on their antiseptic action, in destroying the decomposed products of these retained excretions. As an argument in favor of the theory of fæcal poisoning, in cases of impaction of fæces in the male, the patient nearly always assumes this appearance of anæmia and chlorosis.

With respect to the green-sickness in young women, if medicine were in a position to regulate the mode of life, food, education and especially the selection for propagation of the species, it is quite probable that in succeeding generations chlorosis and many other troubles would become more and more rare in the human race. The immortal bard also understood this condition of affairs when he says: "She never told her love, but let concealment like a worm i' the bud feed on her damask cheek; she pined in thought and with a green and yellow melancholy, sat like patience on a monument smiling at grief."

ALVELOZ MILK IN CANCER—NOTES ON TREATMENT, WITH CASES.

G. W. PADIERA, M. D., ROCHESTER, N. Y.

During the preceding ten years I have had occasion to use Alveloz in some cases of cancer involving the skin and mucous membranes of various parts of the body.

The writer was led to use the drug simply as a matter of experiment, and with a mind prejudiced by scepticism as to the real value of any form of medication, internal or external, in the successful treatment of epithelioma.

The uniformly good results obtained in the cases described below compel him to admit that the drug has proved itself of undoubted value in these cases of true epithelioma. The writer wishes to place these facts before the profession with the hope that others may be led to give the drug a trial and publish their results.

Case 1.—Mrs. Minnie A., æt. 65, German, previous health good, family history negative. Has been suffering for two years from an intractable ulcer situated at the root of the nose and extending upwards upon the forehead, measuring 1½ inches in diameter and steadily growing larger. Epithelioma was diagnosticated by numerous reputable physicians and removal by operation advised. To this the patient positively refused to submit.

Patient consulted the writer April 5th, 1887; found the patient emaciated, poorly nourished, sleepless and complaining of considerable pain at the seat of the ulcer.

The ulcer presented all the characteristic signs and symptoms of true epithelioma, and microscopical examination, which had previously been made, confirmed the diagnosis. The margins of the sore were indurated, reddened, undermined and sinuous, the base was covered up by a grayish pellicle, the indurations involved the adjoining skin to a slight extent, and these nodules were immovable. After carefully cleansing the surface of the ulcer, lint, corresponding in size to the ulcer, was thickly spread with alveloz, applied to the ulcer, and kept in place by a roller around the head. It was allowed to remain in place for eight hours, during which time there was considerable pain and œdematous swelling of the eyelids, part of the cheeks, and the skin covering the frontal bone. The alveloz was then replaced by a compress in a solution of:

℞ Tinct. arnicæ, ʒ ij.
Aquam plumbum, q. s. ad. ℥ iij.

M. Sig.—To be renewed as often as compress is dry.

At this time the ulcer appeared irritable, inflamed and the surface covered by a thin, dark, dry crust.

After the lapse of three days the œdema had disappeared, the pain much lessened in severity, the crust loosened, and the ulcer had a decidedly improved appearance. This procedure was repeated every fourth day; after the first few applications there was no œdema and but little pain; the indurated margins also seemed to be absorbed, and the ulcer gradually healed. The patient was discharged after four months' treatment, with the injunction to appear regularly at intervals of two weeks for examination. The following February, there was a recurrence of a slight hardening in the situation of the cicatrix. This disappeared after five applications of alveloz. Up to the present time there has been no further recurrence.

Case 2.—Mr. A. M., Irish, æt. 72, laborer. Has always been in good health, and gives no family history of cancer. Patient presented an epithelioma of the lower lip, one and a half inches in diameter, with all the characteristics of this lesion. The patient was badly nourished, weak and nervous from loss of appetite and sleep. Treatment of this case was commenced June, 1886. Alveloz was applied every third day, and covered by iodoform and collodion mixture. This patient was permanently cured after three months' treatment.

Case 3.—Louis M., æt. 68, German carpenter, previous health good. His wife died of cancer, and during her entire illness the patient had been her constant attendant. Oct. 8, 1886, six months after the death of his wife, Mr. M. noticed a hard wart-like nodule at the side of his nose, followed in three or four weeks by two similar nodules in the region above the right eye. These excrescences slowly increased in size, ulcerated and became painful. This case was treated in a manner similar to the preceding, and was cured after a period of one year, during which time twenty-five applications of alveloz were made. The reason for the long continuation of the treatment in this case was the irregularity of the patient's visits

A fourth case, cancer of the cervix uteri, at present under treatment, is that of Mrs. Louisa S., æt. 76, German, with the following history: Three years ago while walking up a flight of stairs she fell striking upon her abdomen in the hypogastric region. Shortly after the injury she developed symptoms which caused her to seek medical aid. She first noticed acute, sharp and lancinating pains in the pelvic region, tenderness on locomotion, then leucorrhœa and hæmorrhage appeared, which later became ichorous and fetid. When seen by the writer the condition of the patient was extremely pitiable, she was markedly debilitated, emaciation was well marked, and she had the characteristic cachectic facies. She suffered from constant pain, from insomnia and anorexia.

Physical examination showed the vagina lined by a thick, grumous and very fetid discharge coming from the cervix uteri. To the touch the posterior fornix of the vagina felt hard, nodular and infiltrated and the cervix itself was ulcerated, showing a deep, ragged ulcer which bled upon the slightest touch. In giving the results of the use of Alveloz milk in this case, the writer does not wish to imply that anything but amelioration of the graver symptoms was obtained, but this certainly was accomplished. The woman has so rapidly improved under semi-weekly applications of alveloz with antiseptic after-treatment, that her appetite is restored, she is able to be about, do her own house-work, and suffers no pain worthy of mention. The cancer is undoubtedly extending, and while we anticipate the end, we are no less certain that by the use of this drug her life has been made quite endurable if not prolonged.

Alveloz milk is the prepared juice of euphorbia heterodoxa and other euphorbiæ, a Brazilian

plant, first used in that country. My preparation was obtained from Parke, Davis & Co., Detroit, Mich.

G. W. PADIERA, M. D.

63 STILSON ST., ROCHESTER, N. Y.

A REPORT ON SOME OF THE NEWER REMEDIES.

BY STEPHEN LETT, M. D., MEDICAL SUPERINTENDENT OF THE HOMEWOOD RETREAT, GUELPH, ONTARIO.

Hæmatic Hypophosphites.—This remedy is "par excellence" above all others I have tried in the treatment of the opium habit and alcoholic inebriety. In the former disease I find that I can reduce the amount of opiate taken quicker, and restore the health of the patient more satisfactorily, than by any other tonic which have come under my notice. I have at times tried the experiment of substituting others for it during the treatment of a case, and the result has always been that I have been obliged to stop reducing the opiate and restore this preparation before I could continue the reduction. In alcoholic cases nothing seems to build up the shattered nervous system so rapidly, and many patients, after they leave me, write for the prescription of what I gave them, saying they cannot get anything to equal it, when from over-work or other causes which depress the system, they find themselves depressed and inclined to return to their old habit. It is an elegant preparation, very palatable, and appears to keep for any length of time without becoming altered in appearance.

Fl. Ext. Grindelia Robusta.—I have used this in several cases of asthma where other remedies have failed, with gratifying results. But it must be remembered that in this disease it is common for one remedy to be effectual when others of good repute fail. I may, however, mention one very marked case; it was that of a retired druggist; he suffered intensely; he had used almost everything in the pharmacopœia, and of late had been obliged to resort to morphia as the only thing which gave him any relief. He was just beginning to drift into the habit, the consequence of which he well knew. When he came into my office he was gasping for breath. I gave him a dose of this preparation, (P.D.& Co.) with most gratifying results. He was easy in a very short time, and being anxious to know what had relieved him, I told him, and gave him ℥ ij vial to take home with him. He wrote to me afterwards to know whose preparation it was, saying he had tried all our own makers with a certain amount of success, but he could not get any as satisfactory as what I had given him. He also reported, that whilst taking it he did not require any morphia.

Fl. Extract Jamaica Dogwood.—I have not had as satisfactory results with this remedy as a sedative in the treatment of the opium habit as I had anticipated, though it has not altogether failed to be useful. I am now using it in a special form of insanity and I think it is doing a great deal of good; however I require a more extended observation before I feel at liberty to say anything for or against it.

Fl. Ext. Manaca.—In my hands this preparation has proved most useful in the treatment of chronic rheumatism. The last case I had of this disease was one which had baffled all the practitioners in turn. The patient was a large heavy woman æt. 60 who had been suffering for years, and during the past three weeks was confined to bed, nothing appeared to give her any relief. I put up a bottle of fl. ext. manaca and sent it to her; in three days she was walking about the streets free from all pain and has been quite comfortable ever since, though she has discontinued the remedy; it is now about three weeks since she took any. I have had a good many other cases where it has proved useful in this disease, but the one recorded is the best marked.

WAS IT CHOLERA?

BY KENNETH GUNSOLUS, M. D., DUNDEE, MICH.

I was called August 23d last, at 6 P. M., to attend Mr. J. E., æt. 68, whom the messenger stated was suffering with cramps, and wished me to make haste. In a few minutes I was at his bedside, and found him in the following condition: Surface of the body was cold; features pinched and contracted; his hands looked like the claws of a large bird, so shrivelled and shrunken were they; the pulse at the wrist was almost, if not quite, extinct, and there was absence of the apex beat of the heart; he spoke in a husky whisper only; was in the dorsal position lower extremities extended. Respirations were increased, but dyspnœa was not marked; pupils were somewhat dilated. Temperature of the body was 95°, although the patient insisted on being too warm and throwing off the covers. There was no pain or tenderness over the abdomen, but cramps of the muscles of the lower extremities gave rise to most of his suffering, and they were very persistent and unremitting, and caused him intense suffering. He had also cramps of the upper extremities, and even of the muscles of the neck, but none of the abdominal muscles. This cramping, coldness, stage of collapse if you please, continued for five hours after I was called, during which time I remained with him, and worked over him, doing what I could to relieve his suffering and bring about reaction, by the use of arti-

ficial heat to the body, morphia, brandy, and other stimulants. My efforts were crowned with partial success, for the cramps subsided in a measure, the pulse came to the wrist, and a flush to the countenance. I then left the house at 11 A. M., called again at 2 P. M., three hours later, and remained an hour. During my absence he had vomited once without any effort some two quarts of dirty looking fluid, and passed as much or more by the bowels, of muddy looking water containing a flaky substance like the curd in whey. The vomiting and evacuation from the bowels were neither attended by cramps, and this was his first attack of vomiting and purging since my first visit in the morning at 6 A. M. He took some nourishment after this and then went to sleep for a short time. I called again at 7 P. M., four or five hours after my second visit, and found that he had not vomited again, but had two or three copious discharges from the bowels looking also like muddy-water. His pulse at the wrist was almost imperceptible again, and the cramps were returning. I remained until 9 P. M., gave them no assurance of his recovery, and went home. Was called again at 2 A. M. and found him pulseless, labored breathing, cramps, etc. He died from asthenia at 4 A. M., 22 hours after I was first called, and 28 hours after his attack. Now as to his condition before this attack. Patient was a strong, ruddy Englishman, had some looseness of the bowels the day before this attack, and at night for supper had partaken freely of cucumbers, and green corn. Went to bed at his usual hour which was rather early, and slept until 12 midnight when he awoke, and immediately commenced vomiting and purging. The usual home remedies for cholera morbus were given him by his wife, but without much relief. However, she was not at all alarmed, nor thought of medical aid until the cramps made their appearance, which was about an hour before I was called. Heading my paper as I do in the interrogative, shows my uncertainty as to diagnosis, as well as wishing an expression from some of the readers of the AGE.

THE OXYGEN TREATMENT.

BY JOHN AULDE, M. D.*

In all temperate climates where there is a tendency to the development of consumption, physicians will be called upon to exert themselves while ministering to the wants of patients; so that a few words on the subject of the oxygen treatment will no doubt prove interesting to a large circle of practitioners. The treatment of disease by this method is by no means a new discovery, as the remedy was under trial in Europe a century ago, and twenty years or more in this city; but like many other remedies which have preceded it, its great value was not fully understood and appreciated until it got into the hands of the quacks, who advertised it as a universal panacea. It is strange how quickly anything of this character may be boosted into notoriety, which shows conclusively the value of printer's ink. Owing to the generous advertising it has received in the past six or eight years, the oxygen treatment has been regarded as the last resort of the consumptive; and while the quacks gave oxygen inhalations, the regulars gave cod-liver oil. When this final stage was reached, the anxious expression disappeared from the doctor's face, and the patient had but little time in which to offer complaints. But the use of oxygen is not confined to those who advertise, although it must be confessed that they are largely the ones who make the profit; nor is its use limited to the treatment of consumption and wasting diseases. For the most part my observations have been confined to this class, and as the remedy has done me good service in several cases, it would be selfish to keep the matter secret.

As there is an impression abroad that the use of oxygen in therapeutics requires special skill on the part of the physician, and that it involves a considerable outlay on the part of the patient, a few words as to the apparatus is needed and the expense connected therewith may not be out of place in this connection. The appliances requisite for this purpose I have obtained from the American Oxygen Association of New York, and from a mechanical standpoint, the method is simplicity itself; so that on this score no objections can be offered, and, with moderate expense, the best of facilities are at command. Unsatisfactory results, it is true, have attended the efforts of some, but chiefly for the reason that they have been contented with the use of ordinary commercial gas, compressed in iron or copper cylinders, a method strongly condemned by DR. WALLIAN, who believes that by this process the gas is to a certain extent devitalized. Observers are therefore cautioned that the best results will follow the use of the strictly nascent or fresh gas, which may be readily prepared, all impurities or deleterious elements being promptly eliminated by the process.

For securing perfectly fresh oxygen, two sources are available. The most convenient and at the same time least expensive, when but a small quantity is required, is by means of a preparation of hydrogen dioxide (H_2O_2), commonly known as peroxide of hydrogen, and in a state so decidedly active as to strongly resemble ozone. Brunton says, "It has therefore been used for similar purposes to ozone. It de-

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* Medical Times, September 1, 1888.

stroys bacteria and is a powerful antiseptic." This is the method I have adopted for the most part, and although the volume of gas realized is so small as to seem insignificant, it apparently makes up in quality or intensity for the lack in quantity. The other method recently made available, is by means of a portable generator, which may safely be placed in the hands of the patient or an intelligent nurse, the whole outfit not costing more than twenty-five-dollars.

When the peroxide of hydrogen is to be used, the patient is supplied with a bottle of the solution, generally employed in the strength of ten or fifteen volumes, or two or three per cent., in water, together with an inhaler, the use of which can be explained in a few minutes. A small portion of the dioxide solution is placed in the inhaler, along with a little clean water, and heat applied; the evolution of oxygen soon follows, and the patient is permitted to practice inhalation from ten to fifteen minutes two or three times daily; or in case the inhalation is found to be too laborious, five minutes or less will be sufficient, in which case it is advisable to increase the frequency of its administration. The method resolves itself into a pulmonary gymnasium, by which the patient is permitted to inhale pure, warm air, charged with oxygen, while carbonic acid, which ordinarily accumulates in the lungs and causes depression, is thrown off. Frequently I have thought the patients would derive at least some benefit from breathing through clean water, providing they would do it faithfully; but, as a rule, the friends are not satisfied, nor will the patients themselves be prompted to make effort without some machinery and medicine which cost money, a sad commentary upon the hygienic work the conscientious physician is ever on the alert to direct. The use of oxygen is therefore, in my opinion, simply auxiliary to the general treatment, and not specific. Conducted in the manner I have indicated, there is no doubt of its efficiency, and, by keeping this idea constantly in view, much good may be accomplished in the way of relieving many of the unfavorable symptoms which arise in the course of treatment of these cases, which are apparently hopeless from the beginning.

One of the first cases in which it was used under my observation occurred some years ago, and must be classed as a signal success. The patient was a gentleman well up in the sixties, and was suffering from general debility along with chronic gastro-intestinal catarrh. There was also a history of chronic laryngitis, for which tar inhalations had been used with a moderate degree of success; but the most successful medication appeared useless so far as producing any appreciable effect, and as a last resort he was induced to try the oxygen treatment. In a short time there followed marked improvement, and, without other medication, he rapidly gained strength and flesh. About a year and a half ago, there was another breakdown, but under the use of oxygen inhalations, together with suitable medication, he recovered, and has enjoyed fairly good health since; yet he is not what we would call robust. The gastro-intestinal affection has not been wholly relieved, although with the aid of digestive ferments he manages to assimilate his food pretty well, and has lately been actively engaged in farming, a business which I advised him to undertake instead of office work, which he had followed for twenty years or more. Sudden changes in the weather affected him unfavorably, but there is no history or indication of any rheumatic tendency; neither is there of gout, although indiscretions in diet occasionally bring him up with a short turn.

Another case which may be mentioned was that of a widow lady, aged 35, who two years previously had buried her husband, his death being due to phthisis pulmonalis. During all the time of his illness, she had given him her personal attention, and when first seen there was a suspicion that she also had contracted the disease. Later observations, however, convinced me that I had to deal with a case of catarrhal pneumonia, chronic in character, although I was strongly impressed with the idea that it would ultimately become catarrhal phthisis. The cough was exceedingly intractable, with great depression of the vital powers. The sputa were thick and tenacious, the color and consistency indicating the breaking down of pulmonary tissue to such an extent that my prognosis could not be other than unfavorable. This information was kept a profound secret from the patient, but the relatives were fully advised as to the probable results of treatment. It may be mentioned here that for the preceding two years she had been under the homœopathic *regime*, and had been informed positively that she was going the same way as her husband, all of which, no doubt, added to her depression. The fact that she feared this to be the final result was about the only redeeming feature of the case, and I proceeded with the greatest deliberation. Suitable medication with a view to maintain the nutrition was regarded as of the first importance, and the use of the oxygen was attended to faithfully by both patient and nurses. At first, the inhalations could be continued for but a few minutes at a time, but in the course of a week she was able to take the treatment for the space of ten minutes, about four times daily.

Soon after treatment was begun there was rebellion in the camp; the effort required proved rather depressing, and, besides, she had several serious attacks which threatened to terminate fatally. These attacks were characterized by great cardiac pain, dyspnœa and a sense of choking or smothering, and I must

confess that on several occasions the end seemed near at hand. They were followed, or rather accompanied, by profuse expectoration of muco-purulent clots of such size that I will not undertake to make any comparison, lest it should appear to be a gross exaggeration. In the course of a month or so, after she was able to sit up in bed, she questioned me very pointedly in regard to her prospects, and while I was tempted to tell her what I considered her true condition, the belief that she would quickly succumb under an unfavorable prognosis prompted me to gloss the matter over, and she appeared greatly relieved. A week later she surprised me with the information that she was to be married, and that her engagement had been determined altogether on my prognosis. Here was a dilemma; but the mischief had been done, and it was then too late to retrench. She followed up the oxygen treatment for the period of two months in all, and was married shortly after treatment was discontinued.

Nearly two years have now elapsed, and with the exception of one attack of illness, which usually attends ladies soon after pregnancy takes place, she has enjoyed fairly good health. What the final outcome of the case will be, I am not at present prepared to say; but certainly the prospects are far from bright. Want of space prevents me from giving any of the details of the system of medication which was carried out, but suffice it to say that the picture is not overdrawn, and I am fully convinced that the inhalation of the oxygen saved her life.*

About two years ago I saw for the first time a married lady, aged 25, in the last stages of phthisis, who died two weeks later, in whose case I also adopted the oxygen treatment, first by the use of a spray, and later by inhalation. The spray was used simply as a temporary expedient, because the respirations were so frequent that inhalation could not be practiced. There was extensive consolidation throughout both lungs, the breathing space being wholly confined to a limited area in the upper anterior portion of the chest; but in the course of a few days after inhalation began, profuse muco-purulent expectoration followed, affording great relief to the embarrassed respiration. The pulse was lowered and became much stronger, but the malady had done its fatal work and she expired from exhaustion. In this case the subjective symptoms were manifestly improved, and the oxygen added more to her comfort in the last days than the previous use of anodynes and BERGEON'S method had ever been able to accomplish.

* Patient delivered in July, after a slow labor, and has now fully recovered from the unusual drain on the system incident to pregnancy.

The case of an elderly single lady is worthy of mention, because of the almost immediate relief of "jerky" respiration, which had existed for more than twenty years. The patient had long been a sufferer from chronic catarrhal pneumonia, and had been under my observation for several years. Sometimes it was for the relief of an old diarrhœa which had been lighted up; then it was a bad cough which prevented her from sleeping, and again it was intestinal indigestion. Owing to unnecessary exposure in the winter of 1886–7; she was threatened with acute pneumonia, and was making slow progress towards recovery when I advised the use of oxygen. The suggestion was promptly adopted, and after two days' practice the "jerky" respiration had entirely disappeared. The treatment, along with appropriate internal medication, was continued for two months and she made a good recovery. I do not mean to say by this that the recovery was perfect, because there were organic changes due to age and disease which will prevent her from ever becoming robust; but she has enjoyed better health since than she had for many years previously. If this patient could have been prevailed upon to take regular breathing exercises in a suitable atmosphere, I do not pretend to say that she would not have done as well as she did under the inhalation of oxygen; but it is exceedingly difficult to secure in this changeable climate a proper atmosphere, and besides the physician is often unable to get the co-operation of the patient without an expenditure of money for the machinery.

A gentleman, aged 32, now under treatment, was seen for the first time about six months ago, at which time he complained of cough, difficulty in breathing, lack of appetite, and an insupportable sense of pain or distress in the throat, directing my attention to the neighborhood of the larynx. For a year previous to this time he had been under the care of several physicians, regular and irregular, and to all appearances he was daily getting worse instead of better. He had not been able to gain undisturbed sleep for a whole hour at a time for more than three months, and as a consequence he was pretty well fagged out. Physical examination revealed the presence of numerous rales, moist and sibilant: but there were no laryngeal ulcerations, although the mucous membrane was very much congested. The circumstances all pointed clearly to a case of phthisis pulmonalis, but there had existed no profuse expectoration, such as we expect to find in cases which have run so long a period.

To relieve the throat symptoms, and if possible the cough at the same time, demanded immediate attention. The physicians who had preceded me had probably exhausted all the anodynes in their futile attempts to overcome

the cough, and to increase the dose would only be adding insult to injury. If a single remedy could be found which would answer the purpose, and would not at the same time derange the digestion, which was then in a deplorable condition, I reasoned that we should have a desideratum. I was not slow, therefore, in taking advantage of the teachings of PROFESSOR FRASER, of Edinburgh, who sometime previously had favored me with a copy of a clinical lecture upon "Dyspnœa, especially on the Dyspnœa of Asthma and Bronchitis, and the effects of Nitrites upon it." The patient was ordered to bed at eight o'clock in the evening, and was provided with a one-per-cent. solution of nitroglycerin to be taken in the following manner: Commencing with four drops dissolved in a tablespoonful of water, he has to take one drop additional every fifteen minutes, until he had taken in all eight drops. The remedy acted like magic, the cough was subdued, he passed a comfortable night, and did not care to rise the next morning till late. The experience of lying in bed and feeling comfortable was a luxury altogether new to him, his condition having been such that he was afraid to go to bed, and was always glad when the first streak of day appeared. So burdensome had life become to this poor man that he said he would willingly die rather than go to bed. On the day following the cough was loose, expectoration free, and he congratulated himself on having made a substantial step towarks recovery. The use of this remedy was continued from time to time in small doses until all trouble with the throat had disappeared; but at the expiration of a month his general condition remained the same. Attacks of hectic reappeared at short intervals, accompanied with great depression, and one day it seemed that he was about to breathe his last. At this critical juncture he was provided with the oxygen, and although unable at first to practice inhalation for more than five minutes at a time, and that somewhat imperfectly, he improved under its influence, and the tendency to syncope has disappeared. The use of the remedy was continued for about two months, certainly with benefit, and forms an illustration of its value as an adjuvant to other treatment by producing more perfect aeration of the blood.

I may add that this patient is still living (May, 1888), but he is scarcely able to do more than dress himself and get around his room with care, his strength being limited. To the credit of the oxygen, it may be said to have prolonged his life and measurably relieved his distress, while in addition it has evidently had something to do with laying a foundation for more perfect digestion.

Having already far exceeded the limits originally mapped out for the paper, I will only add that other cases of a similar character have been equally benefited by this method of treatment. The dioxide solution has also proven acceptable when used as a spray in the case of croup; but I have far greater faith in inhalations of the gas than when the above solution is used locally, except that it may be used advantageously as a topical application in ulcers, in diphtheria, and in like affections.

Correspondence.

THE SOCIAL REFORM QUESTION.

"Man's judge of purity and goodness is woman."

As the social purity question is being agitated somewhat in our villages the anxious mother, ever solicitous for the welfare of her daughter, yet, half hesitating what course to pursue, turns to the man who has been with her in the hours of grief and of happiness, her friend and advisor, the family physician. And, my brethren, how shall we advise her? Is the gentle trusting daughter to be thoroughly instructed in all the follies, vices and coarseness of life? Are they all to be disclosed? Is she to be instructed how little men care for the virtue of others? Is she to be taught and instructed on the anatomy and physiology of her sexual being, or is she to go to her husband in complete ignorance and innocence of all these things, soon to drink the bitterest cup a pure soul can taste, the wickedness of the world revealed as it is, how unlike she had been taught it was? Is there no medium between these extremes, and when shall it be taught? Shall she join these social purity clubs, where the matter is constantly agitated and vices brought into prominence, shall she likewise be instructed in the schools on the physiology and functions of her sex, getting just enough knowledge to set her thinking, and, half ashamed to ask her mother, confide in the nurse or some more doubtful authority, and have poured into her trusting and confiding ears, tales of still more doubtful authority till it at last becomes attractive? No, the home, the home where purity of life and thought abide, this should be her school. Who her instructor but her mother, ever watchful and desirous for her best good. Here she should be instructed the necessity of exercise, to court God's sunshine and be warned and advised when the menses appear and the necessity of taking perfect mental and physical rest at this important period. Likewise the penalty of vice, the folly and wickedness which yielding to temptations may lead to; and above all to make her mother her confidant, for it is indeed absurd to think

she will not be placed in position where she may hear these things, but if she has been rightly instructed her own knowledge and modesty will make her an unwilling listener. The benefits flowing into society from the efforts of one good and true medical man in this direction is inestimable in its result.

F. ELMORE, M. D.

B. E. CITY, MINN.

ANTIPYRINE AND ITS DANGERS.

Will you tell me, through the AGE, what the dangers are of the use of antipyrine in typhoid fever, and also the best means of avoiding and counteracting the dangers?

I have used antipyrine in many ways, but never before in typhoid. Let me give you my case: Arthur D., aged 10. When I first saw the child he had a temperature of 102°. At evening 103°. Ordered cold pack to be given and repeated in two hours if the temperature went over 103°. The fever yielded readily to the pack until the eighth night, when it ran up to 105° and remained there in spite of repeated cold packs.

Having heard so much of antipyrine in typhoid, I gave the child ten grains. In two hours the temperature fell to 98°. The pulse which before was 100, full and strong, now was 120 and very weak. Patient broke out into a cold sweat, with hands and feet cold. Was more delirious than at any time before. Continued in this wild delirium all the next day. At 7:00 p. m. the 9th night the temperature was again 105°. Thinking I had given too large a dose before, I now gave but four grains, with almost the same result. Temperature 99°, pulse 120, cold sweat as before. The weak pulse did not last more than two hours either night.

Now, will you tell me if children do not bear antipyrine in proportionate doses? Was there some peculiarity about this child? I had no occasion to try it again in his case, as the temperature did not go above 103°.

So far as reduction of temperature was concerned, antipyrine was a success, but the weak pulse and cold sweat startled me.

A. H. BROWNELL, M. D.

HASTINGS, NEBRASKA.

[The effect noted by DR. BROWNELL was what we should have anticipated from his dose of antipyrine. The dose of ten grains in two hours was a full dose for an adult, and the proportionate dose for a child of ten years should not have been greater than five grains. Antipyrine is by no means a harmless drug, being a very decided cardiac sedative in excessive doses. We have always prescribed it with caution, and in only one instance have noticed untoward, though not by any means alarming, effects. In this case a dose of whisky and carbonate of ammonia relieved the depression. —ED. MED. AGE.]

PICHI.

I have used fluid extract pichi in three cases of irritation of the urinary apparatus that had given me great trouble and which had been treated by myself and others with the usual results, *i. e.*, the symptoms not very much relieved:

Case 1.—An acute attack of cystitis, male, aged 72, resulting from exposure to cold and damp. Used ol. turpentine, alkalies, etc., which relieved the acidity and cleared up the urine. The pain of urinating and the frequent desire preventing rest at night, had to be met with large doses of opium. Prescribed:

℞ Fl. ext. pichi, ℥ ij.
Tr. hyosciam., ♏ ij.
Elixir calisaya, ad ℥ iv.

M. Sig. Take teaspoonful every four hours.

After the first day my patient expressed himself very much relieved, and has been able to discontinue the opium, appetite has become ravenous and he has, after three weeks of this treatment, gained about ten pounds, and "only takes a dose when he thinks he needs it."

Case 2.—Mrs. K., delivered in May of healthy child and until second week progressing finely, when she cohabited with her husband. She has since, to use her words, "been troubled with painful micturition and an inability to retain a tablespoonful of urine in her bladder;" "it had to come and gave her a great deal of pain."

Half teaspoonful doses of fl. ext. pichi (P., D. & Co.'s) every four hours with vaginal injections of hot water, have relieved her almost entirely in two weeks.

Case 3.—A man thirty years of age has been masturbating ever since he could recollect, and has tried every remedy suggested. Has expressed himself as being more relieved of a "constant sensation" along the urethra, by teaspoonful doses of pichi, than by any other remedy he had ever taken.

Of course each of these cases must be taken for what it is worth and with the exception of case 1, are of little value. Still, as urinary troubles are very common in this community, anything that promises relief is gladly accepted, and I have requested several of the profession in whom I have confidence, to try the remedy and report results, either for or against, and hope we may find it the remedy we have been looking for.

TRACY IVY, M. D.

PEORIA, TEXAS

SLEEPLESSNESS AND DRUGS.

I have noticed from time to time recently in the columns of the AGE and many other medical journals references to the newer remedies introduced for the relief of sleeplessness. While the drug which will bathe the brain in slumber and forgetfulness and at the same time leave the functions of the various viscera intact is a desideratum, I cannot but think that in the eagerness of our search for such a drug, we neglect non-medical means which might be equally effective. We know of no drug for sleeplessness which, how fair soever it may be on its surface, does not at its depths harbor misery and death, and the conscientious physician cannot prescribe a soporific without unpleasant misgivings. Should we not, therefore, cultivate to their utmost the non-medicinal means of wooing the sleepy god? Here is a means which I have recently seen recommended in the Lancet: The sufferer from insomnia after taking a deep inspiration holds his breath till discomfort is felt, then repeats the process a second and a third time. As a rule, this is said to be enough to cause sleep. The idea is to cause a slight degree of asphyxia. We know, of course, that carbonic acid gas has the effect of inducing drowsiness, and it is a fact that the expenditure of oxygen is much reduced during sleep, nightly sleep, therefore, coinciding with deficient tissue oxygenation. But, perhaps, the means recommended is helpful in another way, viz., by rivetting the attention. It is well known that concentration of thought is one of the most effective sleep enticers, and various devices have been recommended to bring it about in the sleepless, such as counting, watching the imaginary jets of vapor issuing from the nostrils, etc.

I may be pardoned for this reference to a subject the importance of which we are too prone to overlook. The point I desire to make is that the risk of administering soporific drugs is very great, and that no patient should be given them until all means of a non medicinal nature have been tried and found wanting.

M. D.

PICHI IN CYSTITIS.

I have looked over most carefully the note by J. G. BILLER, M. D., in the AGE of August 25th, on the use of pichi, and would like to say by way of comment that I use the remedy extensively in all of those cases which he mentions, and have as yet failed to get anything but excellent results. Patients suffering from cystitis, or acute gonorrhœa especially, a few remark: "Doctor, I had only taken three doses when all of the pain had left me." I would suggest to the doctor that he give it in ʒ i doses every two or three hours from the first. Thus given favorable results are almost certain.

C. E. MATHIS, M. D.

KANSAS CITY, MO.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., SEPT. 10, 1888.

Editorial.

THE PHYSICIAN IN POLITICS.

Now that the political cauldron has commenced its regular quadrennial ebullition the question of the extent to which the medical profession should contribute to the agitation is opportune. At the St. Louis meeting of the American Medical Association, we mentioned, in conversation with an ex-president of that body, the fact that one of his successors had been honored by his political party with the nomination for an honorable position. The gentleman, somewhat abruptly, expressed his disgust at the information, declaring that no man who would consent to allow the use of his name in any such connection should be a practitioner of medicine. Politics and medicine, he held, are absolutely incompatible, and no medical man who has a proper respect for his profession should seek to contaminate it by suffering his name to be presented for the suffrages of the people. Doubtless, this feeling is honestly entertained by others, who look upon the medical profession as a calling somewhat akin in its nature to that of divinity, and thus liable to be sullied by too close association with the wicked world, and especially with that concentration of wickedness encountered in partisan struggles. The time is now upon us when the consideration of the correctness of this view presses itself upon every practitioner. It is one of the most important collateral questions of the season.

Unfortunately there are aspects of politics which are very repulsive to reputable physicians, in common with all reputable citizens, and they are peculiarly so in so-called "practical" politics. The depths to which one is obliged to descend in having to do with "practical politics," is frequently very destructive to one's self-respect, but why this should be peculiarly so in the case of the physician, or clergyman either for that matter, it is not so easy to discover. The depths in this connection are all the deeper through the fact that those who digged them thus low have not been opposed in their labors by the saving influence of the

better portion of society. The ulcer which has developed on the extremity of the body politic has become all the more foul through the systemic atony which the apathy and negligence of the better element of society has encouraged. Physicians, above all citizens, know that pure expectancy in the case of a rodent ulcer goes beyond the bounds of carelessness, and verges close on those of criminality.

We are not of those who regard it is *infra dig* for the practitioner to show a practical interest in the politics of his country, or who hold the profession of medicine as too delicate a thing to withstand the demoralizing influence of even partisan warfare. It is every good citizen's duty to take an active interest in the political condition of his country, and the more exalted his calling the more binding becomes this duty. But this is not the phase of the question which we had intended to touch on at this time, and we shall not dwell on it. The point we wish to make is that the profession of medicine, as far as its material interests are concerned, suffers from the backwardness of its members in participating in politics. As a profession, physicians are a nonentity in politics, and they are thus, as far as legislation is concerned, at the mercy of those with whom they regard it beneath their dignity to associate in the work of forming the law-making bodies on the composition of which their interests so intimately depend. In every State in the Union the legal profession is as amply protected as legistation can protect it, but though greater in numbers and of equal intelligence with the lawyers, the physicians of the country are practically without legislation in their interests. While, for instance, the laws are such as guarantee the lawyer his fees in the cases in which his services are engaged, the physician must trust almost entirely to the honor of his patrons, and too often he finds this trust a broken reed. Again the laws grant absolute protection to the legal profession against suits for malpractice, while the most careful, skillful and conscientious physician is liable at any time to be heavily mulcted for the untoward outcome of the case with which he may have been connected. These hardships and others which could be adduced are a direct result of the failure of the medical profession to discharge as a body the freeman's duty. In their effort to secure the passage of a reasonable medical act in this state, physicians who have endeavored to interest the Solons at the State Capital are very courteously received, and are treated with a sort of good-natured toleration, as if the fact of their coming out to engineer a bill through the legislature was a joke. How differently the working man, so-called, and the representatives of the saloon interest, are received. The latter are courted and entertained by the law-makers and every possible consideration shown them. The secret of this lies in the fact that they are organized; and knowing the weight of their political influence, are thus prepared to speak and vote with a volume and directness of which the unorganized and indifferent medical profession is incapable. Medical men grumble at the laws or rather absence of laws governing the practice of medicine, and which permit the unqualified and notoriously fraudulent practitioner to come in competition with those who have invested time and money in acquiring fitness to assume the responsibilities of their profession. But while they thus grumble they deliberately turn their back on the only means through which the condition of affairs of which they complain, can be remedied. With proper organization and direction the hundred thousand practitioners of medicine in this country could command such legislation as their material interests demand.

The objection to the physician taking part in the politics of his country based on the supposed incompatibility of politics and medicine, is weak and untenable. When such men as VIRCHOW, PLAYFAIR, SEMMOLA and others, prominent in the councils of their respective countries, can continue their scientific studies, to argue that a man cannot discharge the duties of citizenship and at the same time practice medicine, is to argue a very weak mental calibre on the part of the doctor. We believe that a greater practical interest on the part of physicians in the politics of the country would conduce to their individual as well as their collective welfare. It is not all of the practice of medicine to be versed in the teachings of the schools. A knowledge of human nature, the ability to judge character, or, to put it in the vernacular, "the ability to size a man up," is a important requisite to success in this calling, and certainly there is no school equal to that of politics for qualifying a man in this direction. Our physicians, as well as our clergymen, would be all the better qualified for their vocations were they to mingle more in the practical affairs of life.

Notes.

The following extract from the Lancet is rather amusing at this late date in this country. It has reference to the introduction of the telephone in London: "Residences within the radius of the system may in this way be connected with all the leading local houses of business, including cab-stands, fire and police stations, and the like; and thus all the ordinary, and much of the extraordinary, business of house-keeping may be transacted within doors. The great importance, in cases of sud-

den illness, of facilities for rapid inter-communication, is well set out in the prospectus that has been issued, and we have little doubt that the number of subscribers necessary to float the undertaking will soon be forthcoming."

The Medical Standard says that two "polypathic" doctors, PLUNKETT and RENNIE, who are now operating in the West, were formerly professors in the Michigan College of Medicine. These gentlemen explain in their circular that "poly" is Greek for many, and that, therefore, the "polypath" is one who has graduated in all the schools of medicine. The doctors profess a willingness at all times to exhibit their many diplomas to the doubting ones. The statement that PLUNKETT and RENNIE were formerly professors in the Michigan College of Medicine (the predecessor of the Detroit College of Medicine) is untrue. They were students, and are graduates of that institution, and that is bad enough. We have the inward satisfaction of having delayed the graduation of one of them for one year, but the following year he squeezed through. The present "polypath" was then a very indifferent "monopath."

The Denver Medical Times says the hotels, saloons, and even private houses of that city, are littered with what pretends to be medical literature, and the daily and weekly newspapers are filled with the advertisements of quacks and charlatans. It ascribes this condition of affairs to the overcrowded condition of the profession, and asks, what shall the remedy be? Echo answers, what? But the Journal of the American Medical Association repeats the time-worn platitude "higher preliminary education, higher standard of medical education, and a good medical practice act." What causes the overcrowding in England, and even in Germany? The alleged remedy exists there in its most concentrated form.

The following "Birth Notices" appear in the Cincinnati Enquirer: "FLAMIN—Saturday, 9th inst., at 8.15 A. M., to the wife of D. W. FLAMIN, at College Hill, a ten-pound-boy. Thanks to Dr. Wallingford, of Cincinnati." "GALLION—June 5th, to MRS. NONA GALLION, of Liberty Street, a nine-pound girl. Thanks to DR. WALLINGFORD." This is, doubtless, an effective way of advertising DR. WALLINGFORD'S peculiar qualifications, but, it would seem to us a little strange if MESSRS. FLAMIN and GALLION should be content to allow the doctor all the credit for the happy occurrences. There are communities where such cards would operate very indifferently to ingratiate the doctor with the male members thereof.

A Russian doctor, DREIPOLKHER, an official connected with the hospitals of St. Petersburg, being requested to furnish admission for a woman to one of the hospitals, sent her to several in turn, but, being full, they could not receive her. As a consequence the woman died from exposure to cold. DREIPOLKHER was held responsiple for the woman's death, and was sentenced to banishment to the Arctic regions of Archangel. This bit of news seems to us a little strange after listening to the statement last week of our townsman, Ex-Minister LOTHROP, that the Russian government is not as arbitrary as it is painted.

Unfortunately the belief that the excitement caused by the appearance of the first few cases of yellow fever in Florida, was out of proportion to the anticipated spread of the disease, has proven quite unfounded. The disease has become epidemic, or at least, very extensively endemic, and the fatality is alarming. Let us hope that the vigorous means for its abatement may prove speedily successful and that the investigations which are being prosecuted in the direction of therapeutics, may place some effective means of cure in the hands of the profession.

BILL NYE sent a copy of his book "Remarks" to a friend who was convalescing from a severe illness. On the fly-leaf was written the following: "Presented to HENRY GUY CARLETON while he was still suffering from other causes.—BILL NYE." MR. CARLETON returned the following note of acceptance: "DEAR BILL:—I have not yet received the book. It was cruelly intercepted by the doctor, who said that peritonitis followed by typhoid fever, was all he thought I could stand in one season.—HENRY GUY CARLETON."

The claim that the sex of the child may be foretold by the presence or absence of the morning sickness on the part of the mother, is about on a par with the belief, quite prevalent among old women, that when the mother is troubled with heart-burn the child's hair will be curly, and *vice versa*.

The following is a scrap of conversation between two young ladies, recently overheard: "It would be a good thing for that young doctor ——— if the conceit were knocked out of him." "Good gracious!" exclaimed the other, "don't say that. There wouldn't be enough of him left to hang his clothes on."

DR. J. B. SULLIVAN, of Stanton, Michigan, writes us that he found cascara sagrada an excellent remedy in a case of diabetes mellitus. A detailed record of the case, with full report of the urinary tests employed, would prove interesting.

Medical Progress.

THE TREATMENT OF LUNG CAVITIES.—The subject of the address which I have the honor of delivering before you to-day is that of the treatment of lung cavities. I selected this topic because the cavity-condition is so frequently met in every-day practice; and because I believe that the prevailing opinion that the cavity-stage of phthisis has, in most instances, passed beyond the bounds of human control is not only incorrect, but is prejudicial to the interests of both patient and practitioner; and I trust that before I have finished I shall be able to give you reasons for believing that patients thus affected have not necessarily passed beyond the curable stage of this disease, and that they are far better off than those suffering from an infiltration which is bound to lead up to this condition.

Let us now, at the very outset, briefly study the causes which produce, and the physical features which acccompany a pulmonary cavity. Probably the earliest and most direct cause of this condition, in the great majority of cases, is a proliferation and an accumulation of epithelial elements in the air cells of pulmonary alveoli—the result of a catarrhal process extending down the bronchial tubes.

On account of this rapid multiplication and accumulation of epithelial cells, the small bronchial tubes and air cells become blocked or filled up, and the whole result is a consolidation, or what is commonly called a catarrhal pneumonia. If the process of expectoration of this catarrhal material would keep pace with the rapidity of its formation, neither catarrhal pneumonia nor catarrhal phthisis could ever occur. One reason why bronchitis is a less dangerous disease than pneumonia is the fact that in the former the catarrhal secretion can be readily expelled and an accumulation avoided by the act of coughing; whilst in the latter disease, this secretion takes place so low down in the smaller bronchial ramifications and in the alveolar spaces that coughing rather serves to hinder than enhance the process of expulsion.

In this condition, therefore, the epithelial proliferation continues, the accumulation goes on, a group of air-cells here and another there clogs up and they are bound together in a mass; and the mechanical pressure thus produced gradually interferes with the vascular supply, until finally the whole affected area is entirely cut off from its source of nutrition, viz; the blood. Of course, it is quite readily conceived that if this state of things continue for any great length of time, this isolated spot must perish sooner or later; and this is precisely what happens. The moisture which it contains leaves it by diffusion, the whole becomes a comparatively dry mass of albuminous material, and now begins to undergo a cheesy degeneration. This process is analogous, in every respect, to that which takes place in the manufacture of ordinary commercial cheese. Here it is well known that before the albumen of the milk becomes cheesy, the serum must be separated from it. The cheesy nodule in the lung begins to soften from the centre to the periphery, and so soon as communication with a neighboring bronchus is secured the whole mass is expelled and a cavity is left behind.

These then are the physical features which characterize the evolution of a lung cavity in a large number of cases of pulmonary consumption. So far, the process has been purely inflammatory, and is known as the yellow or pseudo-tuberculous variety of consumption; but during caseation a specific virus is formed, which has the power of generating true tubercle; and while it is true that genuine tuberculosis accompanies and follows excavation, it is also true that it occurs less frequently, and if it does exist, is less extensive than is usually supposed.

After a cavity is once formed, it pursues one of the following courses: (1) It may retain its original size and continue to secrete pus, and may become lined by a secreting membrane; (2) it may enlarge by further excavation of its walls or by uniting with other cavities in its immediate neighborhood; or (3) its walls may contract and its sides come together and cicatrize.

From a therapeutic point of view, which is our chief object to-day, a pulmonary cavity must be regarded in the light of two cardinal principles: (1) that it, as well as the disease of which it forms a part, is inherently a process of necrosis, or of mortification; (2) that not only its size but its existence depends on the degree of local and constitutional resistance. The growth of a lung cavity may, in all its essentials, be compared to a chronic ulcer of the lower extremity. How often do we see in these affections a conflict between healthy and diseased action? The border-line advances and recedes, making the ulcer appear large at one time and small at another, and this in direct correspondence with the local and constitutional strength or weakness of the patient. Such a course is frequently, if not universally, pursued in the formation and extension of a lung cavity. In some phthisical patients, you find that the lung tissue melts away like snow under the burning rays of a summer's sun; while in others, excavation is but slow to appear, in spite of the persistence or the disease, and if it does make itself felt, the process shows but little tendency to spread. Inquiry will probably always teach us that this difference in the liability of patients to lung cavities is owing to a difference in recuperative powers or in resistibility; that in the former instance, in all likelihood, the patient possessed a strong family history of the disease, together with a poor appetite and a want of assimilation, while in the other, there was an absence of these conditions.

As a rule, it may be stated that a patient with a quiescent cavity is more desirable for treatment than one who has an infiltrated lung, and who is bound to pass into cavitation sooner or later. The existence of an inactive cavity, or one very nearly so, is a measure of the local resisting power of the surrounding lung tissue—it is evidence that the lung has the strength to limit the process of disintegration. There is precisely the same general condition here as is found in gangrene of an extremity. The formation of the demarcation-line shows that healthy action has successfully antagonized the march of the disease; but before this occurs there is as much uncertainty as to its point of location as there is concerning the probable size of a lung cavity after the process of destruction has once begun.

What now are the special indications which call for treatment in a patient who presents himself before you with a pulmonary cavity? They are (1) fever, (2) anorexia, (3) wasting, (4) harassing cough and expectoration, (5) loss of sleep, (6) diarrhœa, (7) hemoptysis. First in the order of importance comes fever. The degree of fever which is present in these cases depends on the activity of the process of excavation. If this has ceased and the cavity is what may be called an old one, there is very little or no fever; but it can be laid down as a rule that in all cases of phthisis pulmonalis, even in those which show an erratic, subnormal temperature, excavation is followed by a rise of temperature, With pyrexia are associated rigors, loss of weight, increased oxidation, etc. Fever in phthisis, as in fact in all other diseases, has for a long time been regarded as the result of an infective process. Without entering into an elaborate discussion of the causes and mechanism of fever, it may be stated that, according to the latest researches on this question, to which Dr. Isaac Ott, a member of this Association, has added some of the most vital contributions, the phenomenon of fever must be looked upon as one which is brought about by a disturbance of the heat-regulating centre of the nervous system; or in other words, there is a nervous centre which presides over the evolution and dissipation of bodily heat, the same as there are nerve centres controlling motion and sensation. A disturbance of these latter centres is followed by either pain or muscular spasm, while a disturbance of the heat centre causes a dissipation of heat. Fever is, therefore, a reflex disorder, and, according to this theory, the elevated temperature which accompanies pulmonary inflammation and excavation is due to irritation of the thermogenic nerve-centre and a consequent disturbance of the equilibrium between heat-production and heat-loss of the body.

There is little doubt, too, that the pyrexia of pulmonary phthisis is best controlled by agents which act solely through the nervous system, and this in itself is a strong confirmation of the neurotic theory of fever. Morphine, chloral, potassium bromide, chloroform and ether abolish pain and suppress muscular spasm by diminishing the impressibility of the centres of sensation and of motion. A number of our recently discovered antipyretics, such as antipyrine, antifebrine and phenacetin, bear an analogous relation to the process of fever. They reduce fever simply through their powerful influence on the nervous system.

Now, all these antipyretics play an important *rôle* in the treatment of phthisical fever, yet, according to my own experience, which has been, however, rather limited so far as phenacetin is concerned, I think preference must, on the whole, be given to antipyrine. It is very soluble in water or in any aqueous vehicle, is very palatable and is, therefore, readily administered, which cannot be said of the other two agents. The objections to it are its expensiveness and its tendency to produce erythema of the skin in some cases if given for a protracted period. One thing must be borne in mind while giving these agents, and that is, that the ordinary small doses which are recommended, and which are usually large enough to affect the fever of acute diseases, are of very little use in the chronic fever of pulmonary phthisis. Ten or fifteen grains of antipyrine and eight or ten grains of antifebrine or of phenacetin, every three or four hours, are small enough doses for a beginning, and must frequently be increased, probably doubled, before the fever is permanently subdued.

There can be no doubt that, aside from their antipyretic action, these agents, in virtue of their affinity for the nervous system, also exert a marked tonic influence on the whole body. In saying this I am not unmindful of the fact that when given for the purpose of lowering the temperature in ordinary acute fever, they are liable to bring about sweating and depression, and at times produce a condition simulating collapse. It is needless to say, however, that such a state of affairs should never be provoked in phthisis, and furthermore that the reduction of fever can generally be secured without pushing the action of these agents to such an extreme point.

In consonance with the view that the fever of phthisis is, in some measure at least, due to the absorption of pus and other deleterious material from pulmonary cavities and bronchial tubes, the surfaces of which are in a state of catarrhal inflammation, various antiseptic agents and methods have been devised and proposed for the purpose of combating this infective fever. Medicines have been given by inhalation, by the mouth, by subcutaneous injection, as well as by enema, with this end in view; and while there can be no doubt that disinfectants applied in these ways exercise a beneficial influence on the fever, it is a question whether they do it by a process of antisepsis or by checking the local inflamation in the lungs. Among the agents which probably yield the best results when given by inhalation are ichthyol, carbolic acid and terebene. Personally I can recommend ichthyol, administered through a respirator, in the strength of a twenty-five per cent. aqueous solution. This agent is especially useful in bronchorrhœa and in actively secreting cavities, the profuse expectoration in such cases becoming remarkably diminished in a very short time.

Equal in importance to the reduction of fever is the problem of alimentation. Nothing gives rise to greater anxiety in the treatment of pulmonary phthisis than the persistent loss of appetite and wasting, nothing taxes the ingenuity of the practitioner more, and nothing demonstrates his ability better than his success in devising ways and means whereby his patient is led to partake of a certain amount of nourishment. This constant tendency to waste, without any effort to repair, is so great that one may be led to suspect that the real disease resides in the digestive and not in the respiratory organs. The stomach is, therefore, one of the principal battle-grounds on which the destiny of the patient has to be fought out; and it may be laid down as a law that, if a patient improves in every respect save in eating, he must still be regarded as in a retrogressive state.

The task of making a patient eat, and frequently against his own will, is a very arduous and delicate one, but it can usually be carried out successfully, if sufficient tact is displayed by both practitioner and nurse. System, promptness and perseverance will accomplish much. A little food at regular intervals, and oft-repeated, will furnish a patient a large

amount of nourishment in twenty-four hours, and will convince him that he has the power to ingest a great deal more than he thought he had. I have seen patients who, absolutely refusing all kinds of food, by persuasion, would take a glassful of milk, either cold or hot, every hour and a half or two hours, which gave them nearly two quarts of milk a day; and so soon as their confidence in their digestive capacity was restored in this way, they began to partake of other foods.

Another important feature in the dietary of a consumptive is variety. In this particular, more depends on a good cook than on the physician or nurse. She must be dexterous and be able to render the bill of fare as tempting and as enticing as possible. The consumptive should not know in advance what the table has in store for him, so that he is not allowed sufficient time to manufacture excuses for not eating certain kinds of food. He always eats best when surprised by some new and inviting dish. He should also be permitted to eat anything for which he has a craving, unless it is known to be positively injurious.

In feeding these patients, it is frequently found that the first meal in the morning is vomited. This is generally due to the violent coughing efforts which are required to expel the cavity-accumulations of the previous night. This annoying factor can be overcome in most cases by asking the patient to eat nothing until the coughing paroxysm is over and the cavity cleaned out, or, if it is necessary to eat, to partake only of milk, soup, brandy or liquid food, in tablespoonful doses at intervals.

Now what kind of foods ought such patients to have? Clearly those which contain the greatest amount of food energy in the smallest bulk, and which at the same time confer the greatest amount of good on the body with the least expenditure of vital force in their digestion. Foremost among these are beef, broiled, roasted, rare or scraped; roasted lamb or mutton; eggs, raw or soft boiled; butter, cream, milk, oatmeal, beef tea, soups, milk-punch, whiskey, brandy, wine, beef peptonoids, malted milk and other malt preparations. On the other hand, many other less nutritious foods and condiments, such as asparagus, lettuce, celery, green peas, tomatoes, potatoes, coffee, tea, chocolate, oils, spices, pepper, salt, vinegar, etc., should be admitted to the list. Meals should be served at regular intervals, five or six times a day, and the food should be slowly and thoroughly chewed before it is swallowed. Dinner taken in the middle part of the day should be the heaviest meal, and the last one at night should be the lightest one.

Feeding by the rectum is a method which deserves greater consideration in the treatment of pulmonary phthisis than it has so far received. In spite of theoretical objections, there is no question that, practically, the food which is placed in the lower bowel is digested and absorbed. This method not only economizes the strength of the stomach, but I have seen it counteract the tendency to diarrhœa which exists in many of these cases. For this purpose milk, eggs, beef essence, Valentine's meat juice, the pulp of raw fresh beef may be used. To the eggs and beef a small amount of pepsin may be added. The fluid foods are injected, while those of a semi-solid nature are best given in suppositories. One of the best ways to supply food by the rectum is to obtain hollow suppositories large enough to contain half or a whole teaspoonful of raw scraped beef-pulp, with a little pepsin, and administer them three or four times a day.

So far as medicinal treatment is concerned, much can be done to arouse and restore the digestive power of the patient. A pressure and fulness in the gastric region, associated with sour eructations after eating, is very often relieved by eight or ten drops of dilute phosphoric or of dilute nitro-muriatic acid in a glassful of hot water, after meals, or the same acids in combination with the compound tincture of cinchona, gentian and cardamom, or tincture of nux vomica, before meals.

In the next place, what can be done to quiet the distressing cough and expectoration which accompany the cavity-condition? It will, of course, be understood that the measures which have already been proposed for the reduction of fever and for the improvement of the appetite do indirectly alleviate the cough and expectoration. Cough itself is but a symptom which represents the degree of irritation wrought by the congestion, inflammation and the accumulation of catarrhal material on the terminals of the pneumogastric nerves, and anything which removes these offending causes or reduces their influence to a minimum will also ease the cough. In such a state of irritability, nothing is so soothing as the application of a large flaxseed-meal poultice to the chest. The patient soon experiences greater freedom in breathing, his cough becomes easier, the expectoration looser and a general improvement in the local condition follows. If the cough is troublesome at night, one grain of codeia can be given at bedtime, with $\frac{1}{300}$ of a grain of atropia if there is much sweating, and repeated in two or three hours if necessary. The morning cough, which persists until the cavity is cleared out, can be very much facilitated by teaching the patient to bend his head as low as possible, as if he were in the act of tying his his shoes, or by asking him to go on his hands and knees, with the head lower than the buttocks. These positions, although not very æsthetic, give the law of gravity a chance to aid in the expulsion of the offensive cavity contents.

Hemoptysis is another and, sometimes, a very important and urgent symptom in the treatment of pulmonary phthisis. When I say it is important, I do not judge it so much from a material as I do from a moral standpoint. There is nothing which disturbs a patient's mental equanimity more than the spitting of blood. Its depressing effect is incalculable, yet really in ninety-five cases out of every hundred this symptom must be looked upon as a benefit rather than an injury—a relief to the congested part whence it comes, rather than a detriment to life. In the slow progress of cavity-formation, the larger blood-vessels become obliterated and disappear in the common ruin of the implicated part, and, as a rule, it is only those capillaries exposed on the surface of the excavation, similar to those often observed on the raw surface of chronic ulcers, which give rise to the bleeding. Occasionally, however, as in the rupture of an exposed aneurismal blood-vessel or in what may be called a hemorrhagic diathesis, hemoptysis becomes, indeed, an alarming symptom; but these are the

exceptions. In treating hemoptysis give the patient as much encouragement as you possibly can. You can tell him, with perfect truthfulness, that blood-spitting is always to be expected in such a disease, that in the great majority of cases it must be regarded as a vent of nature to unload the overloaded and congested blood-vessels, and that under these conditions it is of no serious significance. Internally, give the fluid extracts of hamamelis and geranium—one part of the former to three of the latter—in teaspoonful doses every hour or two, or oftener, if necessary. These agents seem to have a special control over venous hemorrhage, and they exert their styptic influence entirely independently of the tannic acid which they contain. They do not, as a rule, produce constipation, but, on the contrary, I have seen diarrhæa follow their use, which would hardly occur if their action were due to tannin; and I can further say that they succeeded in some cases in which tannic and gallic acids and ergot had failed. You will find this combination useful, too, in the hemoptysis which accompanies the early stage of the disease. Of course, if the bleeding proceeds from a large blood-vessel, absolute rest and the recumbent position must be enjoined, and ice be applied to the chest.

Last but not least in importance in treating this condition comes pulmonary gymnastics. Objections are frequently urged against this mode of expanding the lungs after cavities exist, for fear of exciting hemorrhage. While it must be admitted that this objection is not entirely without foundation, yet practically it is shown that the danger is exceedingly limited, and that the benefit which the method confers on the patient does more than compensate him for the risk which he at first incurs. It is certainly indicated. The secret why so many consumptives, even in the cavity-stage of the disease, experience such a great relief when they resort to high altitudes is that their lungs, which are habitually inactive, either from the want of exercise or from being impaired by deposits, are now immersed in a highly rarefied atmosphere which throws every available lung space into action, in order to supply the needed amount of oxygen to the body. The air-cells become fully inflated, and if the products of inflammation are not dispersed, the surrounding lung tissue is kept permeable and the disease is at least kept in abeyance. Very few of these people suffer from hæmoptysis. This method of forcibly inflating the air-passages of the lungs is precisely the same in principle as that which is so effectually employed by aurists in opening and in maintaining the patency of the Eustachian tube. This channel is not only made permeable by such a procedure, but its inflamed and swolen mucous membrane is restored to a more normal condition. Have we not, therefore, tangible ground for believing that that which does good in one case will also be of benefit in the other?

The breathing of compressed and of rarefied air must, therefore, be regarded as an important addition to the therapeutics of pulmonary consumption. A very simple apparatus by which air is prepared for this purpose is found in the machine with two double cylinders With this, the patient can alternately inhale compressed and exhale into rarefied air at the same sitting. When air is breathed in this manner, there is felt during inspiration a gentle fulness and distension of the chest cavity, while during expiration a feeling of emptiness is experienced. Waldenburg states that in this way from fifty to two hundred and fifty cubic inches more air can be inspired than during ordinary breathing. This should be done four or five times a day, or oftener if necessary, to produce the desired results.

In connection with the inhalation of compressed air, bodily exercise and forced voluntary breathing are to be highly recommended. The power of walking is common to most people, and this form of exercise is regarded of great service, even by those who exclusively advocate the high altitude treatment. Dr. Brehmer, of Görbersdorf, was, I believe, the first to prescribe for consumptives walking up a gradual ascent. A walk of half an hour or an hour, twice daily, either on a level or on a slight upward grade, is of great benefit. There are also many forms of exercise which may be carried on indoors, those performed by the arms being the most important. The arms, used as levers, are swung backward as far as possible, on a level with the shoulder, during each inspiration, and brought together, in front, during each expiration; or the hands are brought together above the head, during inspiration, and gradually brought down alongside the body, during expiration. When a deep breath is taken in accordance with either plan and held until the arms are gradually moved downward, or even much longer, the process of chest expansion becomes materially enhanced. Another very effective chest exercise is to take a deep inspiration, and during expiration only to count in a loud voice as long as possible. A male person, with a good chest capacity, can count up to sixty or seventy, while in a female, even with good lungs, this power is somewhat reduced. Practice of this sort develops lung capacity, and the increased ability to count longer is a means whereby the improvement going on within the chest can be measured. The effect of many of these movements may be facilitated by the use of dumbbells and of chest weights.

The subject under review is a very large one, and I might and probably should have dwelt at greater length upon other methods and remedies, many of which are no doubt of much value; but my aim has been to lay only those points of treatment before you which I have tested, and which I can conscientiously recommend, and in doing this, I hope that I have been fortunate enough to impress upon you the conviction that the treatment of phthisis after it has passed into the stage of excavation is not such a formidable undertaking, is not beset by so many drawbacks as it is usually supposed to be; and I furthermore trust that I have succeeded in giving contagiousness to the feeling that no case of phthisis, unless actually moribund, should be treated with that masterly indifference which has hitherto been maintained by the profession toward this class of sufferers.—Thomas J. Mays, in *Medical News*, Aug. 25, 1888.

RECTAL INJECTIONS OF CARBONIC ACID IN THE TREATMENT OF VOMITING OF PREGNANCY.—A perusal of the editorial note on "Hyperemesis Gravidarum," in the Medical

Record of May 19, 1888, has led me to describe a remedy which suggested itself to me from theoretical reasons, and which I applied successfully. I feel the more justified to speak of this remedy as I found it, though in another form, published independently some time after my own first observations and experiences.

Early in the year 1884, I was called to Brooklyn as consulting physician in a case of incessant vomiting in pregnancy. The case appeared to be a very grave one, and many remedies, such as absolute rest and a strict diet, had been employed in vain. I, for the first time, suggested the introduction of carbonic acid gas into the vagina, and exhibited a simple apparatus to accomplish this purpose; I presented also to the attending physician a little paper which I just had published in the Annals of Anatomy and Surgery, December, 1883, entitled "Carbonic Acid Gas as a Local Application to Chronically Inflamed Mucous Surfaces."

My idea was to make use of the well-known anæsthetic effect of the gas on the womb, especially on the os, of which I had spoken in the quoted article. I assumed that the vomiting might be in this case reflex action, originating in necrosis of the womb. For some reason or another my suggestion was not accepted.

In my little paper mentioned, I spoke of my employment of carbonic acid gas in cases of impotency, and more especially of dysentery.

Wertheim ("Kohlensäure gegen Impotenz," Wiener med. Jahrb., 1882, p. 10) had recommended the application of carbonic acid to the penis and scrotum, thus making use of certain physiological effects of the gas upon the epidermis in the treatment of impotency.

I soon found that inflation of the rectum with carbonic acid gas had a more decided stimulating effect on the sexual organs than its application to the external parts by means of a rubber bag charged with the gas, in which the penis and scrotum were encased. The absorption took place much quicker and more completely from the mucous membrane of the rectum than from the epidermis of the scrotum and penis.

The idea of introducing carbonic acid into the rectum instead of into the vagina, in case of incessant vomiting in pregnancy, the former organ offering better facilities for absorption, suggested itself to Dr. Adrian Schücking, of Pyrmont, Germany ("Zur Therapie des Vomitus Gravidarum," Centralblatt für Gynecologie, 1885, No. 12); his cases are the following:

A woman, aged thirty-eight, who had been pregnant four times without experiencing extra difficulties, and had always had easy deliveries, was in the fifth month of pregnancy, and had complained, ever since the first days of this state, of nausea and frequent vomiting. These symptoms did not lessen with the beginning of the second half of the pregnancy; on the contrary, they became considerably aggravated. When Dr. Schücking saw the patient in September, 1884, her condition had assumed a dangerous aspect; she was greatly emaciated and miserable, and could not even retain liquids on the stomach. The uterus and cervix were in a normal state. Dilatation of the latter did not have the desired effect in controlling the vomiting.

The attempts in the way of dieting and other hygienic measures, the usual medication, had brought no improvement. As the patient was sinking rapidly, Dr. Schücking proposed a remedy which he had already successfully employed in another case, a year previously.

This latter case was that of an unmarried lady suffering from tumor of the right ovary, of the size of a child's head. There existed obstinate constipation (probably caused by pressure of the tumor on the intestinal tract), and violent vomiting after each meal. Neither ice nor cold drinks could be retained. The patient refused her consent to operation. Meanwhile she had become so enteebled that she could not raise herself in bed without assistance. After all other remedies had been tried in vain, Dr. Schücking irrigated the rectum with carbonic acid water of the Pyrmont Spring, Helenenbrunnen, which had been warmed to blood heat. This water is highly charged with carbonic acid. Simple warm water introduced in the same way had had no effect on the vomiting. After the first applications of the carbonic acid water the vomiting ceased, and this remedy proved so beneficial that very soon all medication could be dispensed with.

In the case of the above-mentioned patient the application of Pyrmont carbonic acid water proved likewise gratifying. After about two quarts of carbonic acid water had been injected into the rectum, small quantities of water and wine, and very soon beef-tea, milk, and buttermilk could be retained. The patient's appearance, as well as her general condition, improved, but it was found necessary to continue the irrigations daily for six weeks.

In this case, as well as in the first, irrigations with simple warm water, which had been made for the purpose of comparison, had had no influence whatever on the vomiting.

The patient with ovarian tumor did not support substitution of artificial Seltzer water, as it caused ructus and the sensation of violent pressure in the intestine; in the other case, however—that of the pregnant woman—the artificial Seltzer water acted nearly with the same effect as the natural Pyrmont carbonic acid water. It is probable, says Schücking, that the unequal distribution of carbonic acid in the so called Seltzer water, and the development of large bubbles of gas, may have something to do with the different effect. Dr. Schücking assumes that the carbonic acid brought on the favorable results, either by its well-known anæsthetic effect, or its antiseptic action, and finally, perhaps, by the considerable dilatation of the intestine. In both cases of incessant vomiting the condition of the patients had been such that a fatal issue would not have caused surprise.

I confine myself to inflation of the rectum with gas, and never applied the gaseous water in cases of vomiting in pregnancy. The results were invariably gratifying. I have never met another case of so-called incessant vomiting since the one above-referred to, seen in consultation. Perhaps by my early applying the carbonic acid, graver symptoms may have been prevented in one or the other of those I attended.

In certain forms of intestinal obstruction it has been recommended to make use of an ordinary siphon bottle containing carbonic acid water, to attach a rubber tube with a nozzle to the mouth of a bottle, turn the latter upside down, if we wish to introduce the test gas. This mode of procedure cannot be em-

ployed in case of pregnancy. No matter how gentle we may press upon the knob to discharge the gas, the effect—on account of the very high pressure under which the gas is in the bottle—is unpleasant, perhaps dangerous. A severe shock is felt in all the abdominal organs.

Von Ziemssen ("Die künstliche Gasaufblähung des Dickdrams zu diagnostischen und therapeutischen Zwecken," Deutsches Archiv für klin. Med., Bd. xxx., p. 225), recommends for certain cases inflation of the large intestine by carbonic acid. His method is to develop the gas within the intestine, by introducing through the rectal tube, first, bicarbonate of soda, then water, and finally, tartaric acid. He used this method both for purposes of diagnosis and to cause sudden dilatation of the bowel, in order to reduce abnormal positions, strangulations, intussusceptions, etc.

I have never employed Ziemssen's method in the affection we are speaking of, but it may suggest itself in cases where a certain apparatus which I shall describe is not at hand.

The apparatus I employ for the purpose of inflation is an invention of Dr. Robert Rohland, of this city, constructed originally to apply the carbonic acid gas douche to the male sexual organs in the treatment of impotency, and to the vagina in the treatment of certain uterine diseases.

This apparatus, or rather the modification of Dr. Rohland's apparatus, consists of a bottle holding a pint or more, with wide neck, and rubber stopper perforated so as to admit a tube, with the nozzle of a rectal syringe attached to it. To prevent the escape of the gas from the rectum is desirable; a rubber valve to close the anus is attached a short distance below the point of the nozzle. In some cases the valve can be dispensed with, in others a rectal tube may have to take the place of the nozzle.

A solution of six drachms of bicarbonate of soda in about eight ounces of water is introduced into the bottle, and four ounces of crystallized tartaric acid (if pulverized acid is used the development of the gas goes on too rapidly) are added. The bottle is then quickly closed, and the carbonic acid rises through the tube, the nozzle of which has been placed in position before the tartaric acid is put into the bottle.

The apparatus of Bergeon for gaseous enemata will also serve admirably well, but it will not be worth while to procure one for such cases as these.

In mentioning Bergeon's apparatus, I may be allowed to call attention to an observation made by me in 1883, before Bergeon's method was published, and which I gave the above-quoted paper.

My patient, whom I successfully treated for dysentery by means of carbonic acid inflations of the rectum, was afflicted with pulmonary phthisis. While she recovered from dysentery by being treated with carbonic acid gas inflations of the rectum, her diseased lungs improved likewise. I could have anticipated Bergeon if I had drawn conclusions from this coincidence. —A. Rose, M. D., in the *Med. Record.*

TREATMENT OF YELLOW FEVER.—Regarding the treatment of this disease, Dr. George M. Sternberg, U. S. A., in the Therapeutic Gazette, Aug 15, 1888, reports the favorable results obtained in a series of twelve cases treated on the alkaline plan.

His recent researches in Havana have led him to think it very probable that in yellow fever, as in cholera, the specific microörganism causing the disease is located in the alimentary canal. While this is not proved, it is demonstrated that, as a rule, no microörganism capable of development in the culture media usually employed by bacteriologists, is present in the blood or tissues of those recently dead from yellow fever. This view naturally suggests intestinal antisepsis as a mode of treatment.

It is well known that in yellow fever the urine and the vomited matter are highly acid. He has also found the intestinal contents to have usually a more or less decided acid reaction. A microbe, therefore, capable of multiplying in the stomach and intestine in this disease must be able to grow in an acid medium. But aside from this theoretical reason for prescribing alkalies, the highly acid condition of the secretions furnishes an indication for such a treatment, and the writer has long desired an opportunity to see a thorough trial of a decidedly alkaline treatment.

These considerations induced him during his recent visit to Havana to propose the following formula:

℞ Sodii bicarb., grammes x (gr. 150).
Hydrarg. chlorid. corrosiv., centigrammes ij (gr. ⅓).
Aquæ puræ, litre j (1 quart).

M. Sig.—50 grammes (about 1¾ oz.) every hour; to be given ice cold.

This treatment was adopted by Dr. Raphael Weiss, house physician at the Garcini Hospital, and he has just received from him a record of twelve cases treated by the director of the hospital, Dr. Francis Cabera, and himself.

It will be seen that they all recovered, and he adds that every case so far treated at the Garcini by that method has recovered. While these twelve cases were being treated, and a little before, eight cases were treated in the same institution by other methods, and five of the eight died.

Dr. Weiss writes him that in some of the more severe cases he increased the amount of bichloride to five centigrammes (¾ gr.) per litre. He says:

"Administering to the sick the bichloride of mercury, according to your directions, the gastric phenomena are very much modified; the gastric sediments appear later, and in no case have they been entirely dark. In some cases, truly dangerous on account of the state of the patient, in a general sense, gastric sediments (black vomit) did not appear, nor even nausea. The pains in the stomach were not so severe."

In some of the cases Dr. Weiss added benzoate of sodium to the formula, for its laxative effect, and administered daily two enemas containing each a gramme (15 grs.) of the phenate of sodium.

Sherry wine and hypodermatic injections of ether were given during the second stage, when the pulse was feeble and the condition of the patient seemed to call for a stimulant.

With reference to the urinary secretion, Dr. Weiss writes:

"The urine has always been abundant. In some cases the density lowered, but was compensated by a large quantity of urine. Albumin did not appear in some of the cases, in others the amount was small, and in others it reached two grammes to the litre. The albumin has always disappeared on the second or third day, and then the fever ceased."

Whether the favorable results are to be ascribed to the alkali, or to the antiseptic action of the bichloride can only be determined by testing the two remedies separately; but he is very much disposed to ascribe the unusual absence of gastric disturbance, and the abundant secretion of urine noted, to the alkaline element of the treatment, and it is extremely doubtful whether the bichloride reaches the intestine in sufficient quantity to exercise any decided antiseptic effect in that portion of the alimentary canal. The bicarbonate should be free from carbonate of sodium, as the mercuric chloride is decomposed by this salt and by alkalies generally. It is possible that the biniodide might be substituted to advantage in the formula above given.

In some experiments made by him several years since to determine the comparative antiseptic value of the salts and oxides of mercury, the following results were obtained:

	ACTIVE.	FAILED.
Biniodide of mercury	1 to 20,000	1 to 40,000
Bichloride of mercury	1 to 15,000	1 to 20,000
Protiodide of mercury	1 to 10,000	1 to 20,000
Yellow oxide of mercury	1 to 1,000	1 to 2,000
Black oxide of mercury	1 to 500	1 to 1,000
Calomel	.....	1 to 100
Blue mass	.....	1 to 100

The bichloride, the biniodide and the oxides of mercury exhibit a decided inhibitory—antiseptic—effect upon the development of the bacteria of putrefaction in the proportion given in the second column, and we may use these figures as a guide in our efforts to secure intestinal antisepsis by means of these agents; although it is, of course, very uncertain how much of the soluble mercuric salt introduced into the stomach reaches the intestine in an active form—probably very little. In the formula which he gave to the physicians of the Garcini Hospital the amount of bichloride prescribed is really only in the proportion of 1 to 50,000 parts of the solution; but he considered it advisable to commence the treatment with an amount that was entirely safe, and to increase the dose afterward if it was found prudent and desirable to do so. Dr. Weiss has, in fact, increased the dose in several severe cases to 5 centigrammes per litre—1 to 20,000. As all of these cases recovered, we may infer that when largely diluted, as in this formula, and given in small quantities at short intervals it may be safely administered in these doses; but, as already intimated, he is rather disposed to attribute the favorable course of the disease to the full alkaline treatment than to any antiseptic effect of the bichloride in the intestine. In the stomach, however, he would expect a decided antiseptic effect from the medicine as administered; and perhaps this is, after all, what is most needed.

TREATMENT OF DYSPEPSIA.—Inasmuch as dyspepsia is the commonest ailment met with in practice, the treatment should be based upon definite principles, and empiricism as far as possible avoided. In my opinion the objective symptoms presented by the tongue are of great diagnostic value. Subjective ones, such as sour eructations, are not always to be relied upon, and frequently they are not at all well defined. In the determination of the acute cause of dyspeptic symptoms, the question is not so much one of glands and their secretion, as of mucous membranes and their blood supply. Everyone is familiar with the appearance of the foully-furred tongue of acute indigestion, from the irritation of indigestible and offensive food stuffs; and with the rapid cleansing effect upon it of full doses of Epsom salts. It may, I consider, be taken for granted, that when the tongue is furred or coated ever so little, there is congestion to a greater or less extent of the gastric mucous membrane. As Dr. Dickinson (Medical Press and Circular, April numbers, 1888) has ably demonstrated, the coating is due to multiplication of epithelium. This would appear to be a natural consequence of passive congestion. The same effect is observed in psoriasis and seborrhœa, in less vascular tissues.

The indication in treatment, therefore, is to relieve congestion. This may be effected firstly and chiefly by drugs which have an exosmotic action, such as the sulphate and carbonate of magnesia; the sulphate, tartrate and carbonate of soda; aloes, rhubarb, etc., etc.; and secondly by those which have an endosmotic action, and thus diffuse the stagnating fluid through the blood-vessels. Of these the carbonates of ammonia, soda and potash are the most important. Others are the nitrates and iodides of potassium and sodium. By thus unloading and flushing the blood vessels of the intestinal tract, the mucous membrane is generally restored to a healthy condition, which is at once indicated by a more or less clean tongue. When much pain is complained of, from two to three minim doses of morphia solution or chlorodyne may, at the same time, be prescribed. But, when the dyspepsia has existed for some little time before advice is sought, further measures are needed in addition. The intestinal circulation requires stimulating by *carminatives*, such as cardamoms, ginger and capsicum. Still more powerful and direct stimulants are found in those drugs which act upon the muscular and nervous tissues of the blood vessels, such as belladonna and nux vomica, the former exerting a stimulant action upon the walls of the blood vessels through the sympathetic, and the latter through the cerebro-spinal nervous system.

The formula I find most useful is the following:

℞ Ammon. carb., ʒ ss–ʒ j.
Magnes. sulphat., ʒ iij–ʒ vj.
Tinct. belladon., ʒ j.
Tinct. nucis vom., ʒ j.
Tinct. zingib., ʒ ij.
Sp. etheris chlorici, ʒ ij.
Aq. menth. pip, ad ℥ vj.
M. ft. mist.
Capiat æger semiuncian quartis horis.

When the tongue, by its clean appearance, indicates that equilibrium has once more been restored to the circulation in the alimentary tract, there frequently remains a debility or want of tone in the digestive system, shown by

a flabby or loose and pallid state of the epithelium of the organ, coupled with symptoms of anorexia and flatulence. Acids and nux vomica are then of great service, given after meals. Acids are also very useful in the treatment of dyspepsia occurring in elderly and delicate people, whose only complaint is that food "lies like lead" upon the stomach. The tongue in such cases is, as a rule, perfectly clean.

Flatulent colic is an affection of very frequent occurrence, in women particularly. There is not in the first instance any affection of the mucous membrane, for the tongue is generally quite clean, becoming foul only when the colic persists. The mischief would appear to be due to stasis or congestion in the larger venous trunks, comparable to that which occurs in the respiratory tract in asthma. It is generally caused by cold or exhaustion, and it is always accompanied by collapse. In some cases the gall bladder is sympathetically affected, as indicated by pain under the edge of the right ribs anteriorly, shooting through the chest to the right shoulder blade. In cases of this nature the indications are the employment of endosmotics, such as the carbonates of ammonia and soda, for the purpose of obviating the stasis of venous blood, and thus relieving the intense pain caused by the tension of the blood vessels; and the giving of cardiac stimulants, such as brandy and belladonna, to restore the peripheral circulation, and thus prevent collapse. Thus:

℞ Sp. ammon., co.
Liq. ammon., acetat. ää ℥ iij.
Ether chlor., ℥ ij.
Tinct. zingib., ℥ ij.
Tinct. belladon., ℥ j.
Aq. menth. pip., ad ℥ vj.
M. ft. mist.
Sig. ℥ j omni quadrante horæ vel pro re natâ.

Antipyrine and kindred preparations frequently act with great rapidity in such cases as endosmotics, relieving patients thus affected as if by magic; but it is well to keep up their effect with a mixture containing belladonna and ammonia. Local application of heat is also an excellent means of treatment. Morphia relieves the pain, but increases the danger of collapse by its depressant action upon the circulation. Hence it should be avoided. In some aggravated cases the mucous membrane is affected, as indicated by foully-furred tongue and constipation. In these, full doses of the sulphate or carbonate of magnesia should be added to the ammonia and belladonna, and also some carminative, such as ginger or cardamoms; whilst in those cases where there are indications that the gall bladder is affected with the spasm, a calomel and opium pill will generally suffice to effect a rapid cure. The irritation set up by "flatulent colic" not unfrequently affects the arterial capillary system, leading to *stasis* of the blood and sympathetic inflammatory mischief. The diagnostic value of tongue symptoms is here again apparent. The organ presents a dry, hard surface indicative of the effusion of inflammatory lymph between the mucous and submucous tissues of the affected portion of the intestinal tract. In such cases endosmotic remedies, such as ammonia and liquor ammoniæ acetatis, are alone indicated to give flowing power to the stagnant blood. With such treatment the pain is soon relieved, and the tongue quickly resumes a moist appearance.—CHARLES RUMNEY ILLINGWORTH, in *Med. Press and Circular*, August 8, 1888.

PHYSIOLOGICAL EFFECTS OF RUSSIAN BATHS.—Dr. Nikolai Makovetski, of Professor Manassein's clinic in St. Petersburg, has published as a graduation thesis an elaborate investigation made by him on the effect of the so-called Russian bath on nitrogenous metabolism, and on the assimilation of fat and the nitrogenous principles of food. His researches were carried out on four student friends in a condition of perfect health. The baths were given daily for five days; perspiration in a hot chamber was induced, with the usual amount of shampooing, no steam being used. Accurate analyses of the urine, etc., were made for five days before the baths, for the five days during which they lasted, and for two days subsequently. It was found that the assimilation of the nitrogenous parts of the food was diminished, the nitrogenous metabolism being increased. The loss by the lungs and skin was markedly increased, but the urine was diminished, the uric acid, too, was diminished during the days when the baths were given. The baths have the effect of strengthening the muscular and nervous systems, and of increasing secretion where there is much muscular work, especially where the food is deficient in nitrogen, when there is a large amount of nervous and mental activity, and also when there is deficient action of the secretory organs in consequence of preceding hypersection, or morbid conditions such as chronic catarrh of the bronchi, stomach, intestines, or genito-urinary tract, chronic hepatic, renal, or splenic affections. In these cases, together with the baths fats and hydrocarbons are required in the food. As contra-indications, theory would lead us to include all conditions where the nitrogenous metabolism is diminished, and also those where artificially induced diminution of it appears to act prejudicially.—*Lancet*, July 28, 1888.

A NEW REMEDY FOR HEART DISEASE was the subject of a paper contributed by Dr. Orlando Jones, of Harrogate. The remedy is *Cactus grandiflorus*, a native of Jamaica and Vera Cruz. A good description of this plant is given by Grim. Its flowers are remarkable, being very large, the calyx measuring about a foot in diameter. It is possible, Dr. Jones thinks, that other plants of this order may be equally valuable, as possessing properties that will control the heart's action, for Professor Bently states that the fruits of many species are useful in febrile diseases. Dr. Jones gave notes of cases in which the remedy had been used as a substitute for digitalis when that remedy is inapplicable owing to its over-stimulating action, and in cases of feeble heart. The final stage of the action of the drug is that it strengthens the heart, and consequently improves the circulation, so that the result of the exhibition of cactus is the reverse of that seen in digitalis.—*Chemist and Druggist*, August 11, 1888.

The Medical Age.

Vol. VI. DETROIT, SEPTEMBER 25, 1888. No. 18.

Original Articles.

PROPHYLACTIC TREATMENT IN EYE DISEASES.

J. E. ENGSTAD, GRAND FORKS, DAK.

All parts of the eye are under a continual pressure, internal and external. Any disturbance in the pressure may cause derangement of these parts. The external ocular tension is caused by the presence of muscles attached to the sclerotic, the eye lids, and the orbicular muscles; these all press the eye backward against the fatty tissue in the orbit. The internal pressure proceeds from the aqueous and vitreous humors and the circulating fluids of the eye.

The capsule is, to a certain extent, pliable or elastic and will expand and become harder from internal pressure, but at the same time the external pressure will keep it from dilating and so keep up a certain equilibrium.

The only practical way to examine the tension of the eye is by the tips of the finger. The sclerotic will give a very accurate impression of the pressure of the eye, and may be recognized, after a little practice, by any physician. The procedure I followed is to ask the patient to look at the floor and then tell him to shut his eyes. A complete relaxation of the muscles around the eye, is necessary before an accurate diagnosis can be made. A number of perfectly healthy persons should be examined at first by any operator, so as to know what the normal tension is.

Any increase in the fluid in the eye will cause hardening, provided the capsule does not yield to its abnormal pressure.

The internal tension is not to be judged by the hardness or elasticity alone. Age, sex, and individual characteristics will present a wide range of resistance. A young eye may not feel nearly as resisting, when the pressure is considerable, as an old eye when the pressure is small.

The ability to make a diagnosis of increased pressure is necessary on the part of all general practitioners, for many a man has been sent to the specialist when too late, or for some trifling ailment, when a little practice would have saved a doctor great mortification, and the patient from an advanced glaucomatous eye.

Pain, dimness of vision, and presbyopia are always to be heeded as warnings of possible danger and as admonition to careful examination.

The last decade has been rich in discoveries in pathology and treatment, but the lamentable fact yet stares us in the face that every year a large number of eyes are ruined, despite the very best and safest of known treatment.

The causes of conjunctivitis are sudden changes in the atmospheric surroundings, foreign bodies or irritating substances brought within the eye. The symptoms are first like a grain of sand under the lid. In a short time the tears will flow, often quite profusely, and at last pus; pain around the eye radiating upward toward the top of the head, and worse at night; swelling is often considerable. In small children the great danger to the cornea is from the swollen lids, and consequently external pressure, the infiltration by the septic material, and the retention of the pus and irritating substances under the lids. By removing the pressure, and establishing the normal function of the cornea, the greatest danger—ulceration—is warded off.

The safest and best treatment in such cases is myotomy of the muscularis orbicularis palpebrarum, at the external canthus.

A small, centimeter, cut is only a little better than a leech. The correct procedure is to cut twice—one cut upward and outward and one in a downward direction, so as to cut both attachments of the muscle. By a small cut outward the attachment is only wounded.

The operation is rather difficult and both chloroform and good assistance is needed. The operation is not a recent one, but was not in good repute until some years ago. Hemorrhage in some cases may cause trouble. If the operation is successful the patient cannot close the lids, the spasm will disappear and no difficulty will be experienced in elevating the lids. After the operation if the secretion is of an offensive, sticky character, a few drops of solution nitrate of silver (one per cent.) should be dropped in the eye and an antiseptic, light dressing applied. If the secretion is watery an eye-water made of boracic acid quinia and sulphate of zinc should be used. Should any complication arise, the eye should be made as elastic as possible. By reducing the pressure we prevent what is dreaded—ulceration. Eserine, one-quarter per cent. solution, twice a day, is indicated in those cases.

If the eye is soft and elastic it is often the cause of ulceration and perforation. In that case atropia is indispensable. Paracentesis may often prevent large ulceration of the cornea and its sequellæ.

Simple ophthalmia is so well known that a general description of the disease is not necessary. As scrofulous ophthalmia is also well known, only three reflex phenomena will be mentioned, viz: photophobia, lachrymation and blepharospasm.

From the mild form of the disease in a child, when the eyes are moist and in which the child shades the eyes with its hands, to the severer cases, where it nestles its head in its mother's lap and at the same time seeks relief by rubbing the eye, exciting the warm and abundant flow of tears, with excoriations of the delicate skin, when the eye-lids are tightly closed, when the whole face is swollen, and when the child resists all examinations, the practitioner has a picture that he will never forget. These symptoms, in the majority of cases, are caused by blepharospasm, which is in turn a reflex of the irritation of the economy.

Its action is to press the cornea externally while, as often happens, the internal pressure is increased and presses outward with increased force. The circulation of the organ is thus impaired. The use of atropia is often all that is needed under these circumstances, but the attending physician must not lull himself into the pleasant belief that he has done all that can be done after he has instilled this into the eye. In some cases, however, atropia is not indicated, because: (1) It paralyzes the accommodation, and irritates the symphatetic. (2) It depletes the iris by the contractions of its vessels. (3) It increases the intra-ocular tension.

The reason the drug acts favorably in cases in which it is useful is because of its being a local anæsthetic to the eye and by the paralysis of the accommodation. This anæsthesia will act favorably on the reflex phenomena, the blepharospasm and lachrymation, and, consequently, with almost instantaneous relief to the eye. The increased intra-ocular pressure is not to be compared with the result received from the diminished external pressure. Often a solution of atropia does not act favorably because the patient will keep the eye so closed that it does not get time to act on the cornea. Dry atropine may be found useful in such cases.

But a number of cases do not improve under this treatment, and then we have recourse to a remedy to which the medical profession can point with pride, as it has often worked wonders. This remedy is yellow oxide of mercury made into a salve—the celebrated Pagenstecker salve.

A combination like this is often indicated:

℞ Oxyd. hydrarg. precip., 0.10.
Sulph. atropiæ. 0.03.
Vaselini, 8.00.
M. f. ungt.

In the great majority of cases this remedy will effect a cure, but there are cases where the salve only irritates, and in those a reduction of the active conjunctivitis should be tried, and if not successful, the physician should not hesitate to perform myotomy. If it is desired to keep the lids separated for some time, the conjunctiva should be stitched to the wound, and so prevent an early healing together of the two surfaces. An operation of this kind will do wonders when combined with suitable treatment. The constitutional treatment should receive our most careful attention in the case of eye diseases.

INTERMITTENT FEVER.

REPORT OF LECTURE BY J. J. MULHERON, M. D., PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE IN THE MICHIGAN COLLEGE OF MEDICINE AND SURGERY.

Gentlemen:—You will recall our classification of the acute diseases into miasmatic, contagious and miasmatic-contagious, and the definition of miasmatic diseases as those caused by the entrance into the system of a poison generated in the soil, where it exists independently of its existence elsewhere, or its pre existence in an animal body. The most typical of these diseases is intermittent fever, which will engage our attention at this hour. Intermittent fever may be defined as a disease of malarial origin, characterized by the periodical recurrence of a sudden chill, followed by a sudden rise of temperature, and this, in turn, by an equally sudden defervescence. The term "malaria," in its etymological signification meaning bad air, has come to have a restricted application to that particular form of bad air which is found in the neighborhood of swamps, under certain conditions.

The disease has also been called paludal, or marsh fever, from its supposed exclusive origin in swamps. We know, now, however, that this supposition is erroneous. While swamps most frequently furnish the conditions under which alone the poison can be generated, these conditions do not exclusively pertain to them. They are soil impregnated with organic (vegetable) matter, moisture and heat. The two latter must be operative alternately. Soil constantly covered by water is not favorable to the generation of the poison. The neighborhood of swamps is dangerous only, or chiefly, during the season when the sun's rays are most

direct and when the covering of water has been evaporated by the consequent heat. When the disease has occurred in apparently desert places, the exception to the rule that moisture is necessary to the development of the poison, is apparent rather than real. Examination of the soil in such cases reveals organic matter, and though the surface may be free of water the moisture is abundantly supplied by evaporation of the water deep below the surface.

This is about all we know of this remarkable poison. It has thus far eluded the search of the microscope and the reactions of the test-tube. While it is clearly *sui generis*, we know it thus far only as we know the wind, by its effects. It would have been strange, indeed, if during the centuries in which the disease which it causes has been familiar, theories of the nature and action of the poison had not abounded. It would be more interesting than profitable to refer to these theories in detail, and we shall take time to briefly allude to but two of more modern origin. One of these had its origin quite near home, and for a time attracted considerable attention, viz., the theory of DR. SALISBURY, of Cleveland, who claimed to have discovered in the water and soil of malarial districts certain algæ, of the genus palmella, which he alleged to be the long-sought-for germs of malaria. Although he claimed to have discovered these in the blood of ague patients, he never demonstrated the fact that their introduction into the blood would cause intermittent fever. This was the weak spot in his theory, and when the algæ which he held were generated only under the conditions which he recognized as essential to the generation of the malarial poison, were discovered on the summits of the Alps, where malaria is unknown, the whole structure which he had erected was demolished.

The other theory, which is still clung to by those who cannot conceive of a disease without an antecedent germ, is that enunciated by KLEBS, of Prague, and TOMMASI-CRUDELLI, of Rome. These observers, by placing plates of glass coated with glycerin jelly in malarial regions, collected thereon a particular kind of bacillus, rod-shaped and thread-like. By the culture of these they were further developed into jointed filaments, with spores in their interior. These cultures on being introduced into animals gave rise to a fever very similar in its nature to intermittent fever, even to the characteristic enlargement of the spleen. The long-felt want, the *bacillus malariæ*, had now, it was thought, been discovered. Unfortunately, however, the germ has not yet been discovered in other malarial districts than those in which KLEBS and CRUDELLI found them, and then, too, the temperature chart, which these observers give of the fever following the introduction of their bacilli, does not present the definite and characteristic tracings of the chart of a case of intermittent fever of spontaneous origin. These facts are fatal, in the majority of minds, to their theory, and justify the belief that the bacilli which they discovered are merely incidental, and that the fever which they cause is of a kind with that which is apt to follow the introduction of any septic matter into the system.

While, therefore, we may be on the trail of the essential germ of malaria, we cannot say that we have been able to bring it to bay. Facts warrant the belief that it is an entity and justify the hope that it will some day be discovered. It is a something capable of being intercepted by foliage and, like the choke-damp of mines (which, however, is indisputably a gas) cannot find a passage through a fine wire gauze. A row of trees between the malarious swamp and the habitations of men, has a beneficial effect in protecting them against attacks of the emanations, and it has been demonstrated that a wire-gauze screen covering the window of a sleeping department in a malarial section, has a similar protective influence.

Like most other poisons causing so-called specific diseases, the poison of intermittent fevers on entering the system remains for a time dormant, or, at least, its activity is not manifest. This period of incubation is of variable length. Instances have been noted in which the characteristic paroxysm did not appear for three weeks, and, on the other hand, it has been known to occur in twenty-four hours, but in the great majority of instances a week is about the duration. A period of malaise, fatigue, pains in the limbs, headache, nausea, fulness at the epigastrium and other symptoms of disordered digestion, usually precede the first recognized stage of the attack, viz., the cold stage. This stage sets in with a feeling of listlessness and an uncontrollable tendency to yawn and stretch. A shiver soon supervenes, and this proves to be but the harbinger of the chill, which first begins along the spine and extends over the system generally. The victim now shudders and commences to shake. His knees knock together and his teeth chatter. His voice becomes small and tremulous, he grows pale, his lips become livid and his skin assumes the condition known as the *cutis anserina*, or the goose-flesh skin. Naturally one would suppose that the patient under this condition would present a very decided lowering of temperature. The thermometer does not, however, show this to be the case, for it registers in the rectum a slight elevation rather than a depression. It is only the surface temperature that is lowered. During this stage the urine is pale, and increased in quantity, and often irritating

due probably to the increased elimination of of urea and the chloride of sodium.

The hot stage develops gradually on the subsidence of the cold stage. The shivering and sensation of cold gives place to a glow of warmth which gradually develops into a sensation, objective as well as subjective, of pungent of heat, the temperature rising to 104° and higher, reaching sometimes as high as 106° in a very short time. The pulse becomes full and throbbing and the breathing deep and frequent. Headache generally supervenes, and the patient becomes very restless and uncomfortable. The urine changes to a high color and diminishes in quantity.

The sweating stage now sets in. It makes its appearance in the occurrence of moisture on the forehead, whence the perspiration spreads until the whole body is literally bathed in sweat, the secretion saturating his clothes, even his bed clothes. The fever commences to subside with the onset of the sweating stage, before the termination of which complete defervescence has been established. The urine in this stage shows a heavy deposit of urates. The pains, uneasiness, thirst and general feeling of wretchedness which characterize the hot stage now disappears, the patient falls into a refreshing sleep and awakes feeling quite recovered.

The "intermission" from which the disease takes its name is its characteristic. It follows the sweating stage and consists of a period of complete absence of fever and other disturbance. Paradoxical as the statement may seem, this period of complete "wellness" is a part of the disease. It lasts for a variable time, from the length of which the form of the intermittent is classified. When the fever returns every day the attack is called quotidian; when it recurs every alternate day, it is a tertian; and when there are two days of complete intermission, it is known as a quartan.

The paroxysm consists of the three stages mentioned—the hot, cold and sweating, and varies in duration with the form of the attack. In a quotidian it lasts for from ten to twelve hours; in a tertian, from six to eight hours; and in a quartan, from four to six hours. The period of the day in which it occurs also differs. In quotidian the paroxysm occurs in the morning; in a tertian, about noon; and in quartan, along towards evening.

The above are the distinctive forms in which the disease occurs and the characteristics of their course. They are not, however, by any means the only forms in which the results of malarial infection manifest themselves. This fact is so well recognized that the term "malaria," even when not stretched beyond its legitimate dimensions is as comprehensive in its covering capacity as ancient charity. The extent of its capacity in this direction has led to its abuse, and, it is to be feared, it is often employed as a cloak for ignorance and inability to make an exact diagnosis. The fact, however, remains that there are masked agues, neuralgias and conditions of malaise due to malarial poisoning which are not clearly defined as to their periodicity, but which, nevertheless, show their nature by the promptness with which they yield to antimalarial medication. The malarial poisoning may also complicate other diseases and it is the practice of old practitioners in malarial districts to commence the treatment of most acute diseases by the administration of a large dose of quinine to antagonize the malarial complication. Experience has so taught them the value of the practice that they have fallen into it somewhat as a routine. Perhaps, however, they do not take sufficiently into account the fact that quinine has other properties than that of antidoting the malarial poison. But this is a phase of the question which we cannot now take time to discuss.

The long-continued action of the malarial poison produces a depravity of the system, characterized by sallowness of complexion, a damp, clammy condition of the skin, a furred tongue, depression of spirits, unrefreshing sleep disturbed by unpleasant dreams, indisposition to either physical or mental work, etc. Associated with this condition, which is known as the malarial cachexia, and, probably, largely the cause of it, is that of melanæmia, or the presence in the blood of a brownish or black pigment, which is partly free and partly enclosed in the white blood corpuscles. This coloring matter may also be found in the solid tissues and exists in the form of minute granules. In cases of profound infection the liver, spleen and kidneys assume a slaty gray color, and the marrow of the bones takes on a brownish tint. In this condition, even though the melanæmia may not be distinct, the spleen is markedly increased in size giving rise to the term "ague-cake" as descriptive of the form which it assumes. The liver, too, is generally enlarged and may be so congested as to permit an escape of albumen sufficient to create the suspicion of BRIGHT'S disease. The most characteristic enlargement is, however, found in the spleen, and instances have occurred in which the organ has encroached into the right hypogastrium. You have seen the case of the young lady at present under treatment in the Emergency Hospital, in which the outline of the spleen is distinctly discernible two inches beyond the umbilicus. She came from a malarial part of the State and has a history and the appearance of malarial infection. It is a typical and instructive case in this connection.

The cause of the periodicity of the paroxysms of malarial fever has long been a subject of conjecture and speculation. The paroxysm is either a reaction against the accumulation of the poison (*bacilli malariæ* ?) in the system, or

the result of the destruction of a normal constituent of the blood. A sufficient quantity of the poison is destroyed by the fever to induce toleration of the unconsumed portion, which latter developing again during the intermission excites the system at the end of a fixed time to another explosion. DR. H. BENCE JONES discovered in the normal blood a fluorescence similar to that which characterizes an acid solution of quinine. Subsequent observers discovered that under the influence of the malarial poison this remarkable property was absent. The fact that quinine restores it is very suggestive, and the observation is one which would seem to throw some light upon the subject of the periodicity of the paroxysms of the disease in question.

There is very little danger of mistaking a well-defined attack of intermittent fever for any other disease. When, however, it is remembered that such attacks are not the invariable forms in which the malarial infection shows itself, it is not strange that errors in diagnosis are not unusual. The hectic of phthisis, the chill and subsequent fever of the onset of pyæmia, the disturbance incident to the formation of pus, etc., have been mistaken for the manifestations of malarial poisoning, and the error is liable to be made again and yet again. It can be guarded against by the exercise of care and an intimate acquaintance with the symptoms of the conditions named. While they present some appearances in common with those of ague, errors in diagnosis may be effectually guarded against in the vast majority of cases. If a mistake have been made it will be rectified on the appearance of regular periodicity, and should this characteristic of malaria not appear the search for the other causes likely to induce chills and fever will be in order. It will behoove you never to pronounce a disease malarial simply because it may have been ushered in by a chill. The careful diagnostician will institute interrogations calculated to lead deep below this surface indication.

The treatment of intermittent fever furnishes one of the most striking illustrations of the of the value of medicine in combating disease. If there is a specific in medicine we have it in the action of quinine in ague. The only questions touching the use of this drug in this disease are in regard to the time of its employment—whether it shall be administered during the paroxysm, or during the intermission; and whether it shall be given with or without previous preparation of the system. Experience has, however, shown that these questions are of comparatively slight importance, although it is proper enough to consider them when the necessity for prompt action is not pressing. Ordinarily it is best to wait for the intermission and to give some preparatory treatment before administering the quinine. In such cases treatment adapted to the several stages may conduce to the comfort of the patient. For instance the application of hot bottles to the feet and the giving of warm drinks during the cold stage are useful to this end. In very severe chills the symptoms may call for stimulants, as ammonia, alcohol, ether, etc. In the hot stage cooling drinks and diaphoretics, such as liquor ammoniæ acetas and even small doses of gelsemium may be given with advantage. They at least act nicely as placeboes. In the sweating stage there is no necessity for interference, but it is a favorable time for the exhibition of a cholagogue cathartic, as a preparation for the quinine, which is to be given in anticipation of the next paroxysm. There is usually, and perhaps always, some hepatic derangement in these cases, and I am partial to the following pill:

℞ Euonymin, gr. iij.
Podophyllin, gr. ¼.
Ext. belladonna, gr. ss.
M.

If this has not caused an evacuation inside of five or six hours, a Seidlitz powder should be given.

After the bowels have been thus freely moved, quinine must be given in such doses and at such intervals as will permit of the ingestion of the necessary amount before the turn of the next paroxysm. The amount should in no case be less than twenty grains. In a quotidian five grains may be given every three hours; in a tertian six grains should be given every six hours. Should the type be discovered to be a quartan not less than a drachm should be prescribed during the intermission, and this should be given in divided doses of six grains every four hours until the head symptoms have been thoroughly and even severely established. It is not safe to temporize with a quartan intermittent. You cannot guarantee the patient against a fatal result should you permit him to have another chill. But even these large doses of quinine sometimes fail to prevent the recurrence, and in such cases arsenic must be resorted to as an adjuvant. Five drops of Fowler's solution may be given in combination with the cinchona salt. Warburg's tincture, a combination of quinine, aloes, rhubarb, camphor, opium, and various aromatics, is valuable in such cases, as it is also in ordinary cases. This combination is successfully employed in the deadly agues of India. The formula, which was for a long time a secret, is now the property of the profession. It is a notable exception to the rule that polypharmacy should be discountenanced.

Whether quinine acts by destroying the *bacillus malariæ* (?) or by restoring to the blood the fluorescence, which disappears under malarial infection, we do not know. We do know,

however, that it does break up an intermittent, and we can afford to remain in doubt as to how it does it. When giving it for its antiperiodic action, give it with a firm hand and in decided doses. The homœopathic plan doesn't work here. Nature doesn't cure ague, and placeboes are dangerous delusions in connection with this disease. Our friends of the infinitesimal faith have been forced to concede this, and, to their credit be it said, the honest practitioners of that school lay aside their prejudices and give good round "allopathic" doses of quinine when they encounter a case of ague.

In exceptional cases, and particularly in cases of long-standing, quinine fails, and then recourse may be had to the various other drugs having antiperiodic properties. Among these arsenic stands first, salicin, salicylic acid, tincture of iodine, black pepper, and eucalyptus follow in the order of their importance.

The complications of intermittents must be treated on general principles. In the chronic enlargement of the spleen an ointment of biniodide of mercury rubbed in over the organ is a useful adjuvant to internal treatment.

In the cachexia which ensues on the prolonged action of the poison the ferriginous tonics and the medicines known as alteratives, are indicated. The following, which might be known as the tincture of the five chlorides, is an excellent combination for this condition, as it is, indeed, in poverty and depravity of the blood due to all causes:

℞ Hydrarg. chloridi corrosivi, gr. ii.
Tr. ferri chloridi,
Acidi hydrochlorici diluti, ää ʒ iii.
Liquoris acidi arseniosi, ʒ iss.
Potassii chloridi, ʒ ss.
Syrupus simplicem ad ʒ vi.
M. Sig.—A teaspoonful in water four times a day.

Note that it is the chloride and not the chlorate of potassium that is called for in this prescription. The average druggist will require to have his attention especially directed to this fact. The chloride of potassium is a peculiarly valuable salt in the treatment of anæmia. The necessary regulation of diet, hygienic precautions, etc., must, of course, receive attention.

In the prophylaxis of ague, the observance of the recognized rules of health, proper attention to sanitary surroundings and personal hygiene, and the exhibition of tonic (two grains) doses of quinine three times a day will usually be found effective.

THE MODERN PHYSICIAN.*

From the earliest days of my experience as a teacher it has been customary with me to use expressions and to act in a spirit, of which you may readily judge for yourselves from the following brief paragraph, taken from an address to students of medicine, delivered more than twenty years ago: "The first lesson to be learned in order to make all other lessons possible is, in my opinion, this: to deal very largely with things and not with mere words; to realize as much as you can all your instruction by making it your own through personal observation; to suffer nothing, if it can possibly be avoided, to lie in the mind as a dead weight of vocables, oppressing the memory and dwarfing the intellect; but to bring everything into the living light of fact and of nature, and thereby at once to assure to yourself the truth and exactness of your knowledge, while at the same time you are stamping it down upon the memory by the most sure and lasting of all technical methods."

No one can be more ready than I am to admit that there are—nay, that there must be—limitations in the very nature of the case to the too absolute recognition of this ideal. It is said by some that the spirit of modern science is ungenial and hard, even pitiless, and therefore not at all fitted for the ministrations of humanity; that it tends to make the suffering man, the patient (as we call him), into a mere case—a thing to be observed and noted rather than a man of like passions with ourselves, and therefore to be treated with consideration and sympathy. There may be just a grain of truth in this; and to whatever extent it is true, we of this medical school claim to be aware of the fact, and to be ever on our guard against the tendency. But none the less it may be affirmed with entire truth, and with cumulative evidence if need be, that all the evils inflicted on poor suffering humanity by the physician as scientist, have been but a drop in the bucket as compared with those which have sprung from the too slavish adoption of traditions, in which there never was any trace of the scientific spirit at all.

I will venture in advance (although I know as yet but little more than the general subject on which he is to speak) to commend to your notice the forthcoming Address in Physiology by my esteemed colleague Professor McKendrick, as a sample of the kind of instruction which we of this University and medical school consider to be among the legitimate developments of the study of φύσις as applied to our art. But in doing so I shall venture to anticipate—because I am well assured that anything I can say here will only give expression to what will still more clearly emerge from that discourse—some of the discouragements to which I referred a moment ago—the difficulties we experience in training our students adequately on the lines we have laid down for them. These difficulties are manifold, and they are

* Abstracted from Dr. W. T. Gairdner's Presidential Address before the British Medical Association.

not of our making, nor are they peculiar to Scotland. I have only time now to refer to two of them.

The first of these difficulties belongs to the medical curriculum, in which, although chemistry, botany, and natural history have long been with us a necessary part, and, so far as they go, a well-conceived and valuable scientific basis for the more technical part of our teaching, nevertheless physics proper—or, as we call it, natural philosophy—the very first step in the study of the laws of matter, is still but very imperfectly recognized. This great omission has arisen, no doubt, from the fact that these laws were supposed to be taught, and in a measure were taught, in connection with chemistry, which, from its old hereditary relations with pharmacy and the pursuit of the philosopher's stone and the elixir of life, had from time immemorial a claim on the physician. But when we consider how completely modern science has demonstrated the subordination of living bodies and physiological processes, not to a wholly detached set of laws termed vital, but to all the most elementary laws of matter; and, further, the correlation of all the physical forces throughout the universe, so that the living body and its environment act and react on each other throughout infinite space and time, it will be readily admitted, I think, that some kind of systematized instruction in physics, and not a mere elementary examination in mechanics, should be an essential part of an education with a view to the medical profession.

But this leads me directly to the other difficulty, or disadvantage, under which the Scottish universities have hitherto labored in endeavoring to restore to the healing art its ancient association with the study of Nature. And this is by far the graver difficulty of the two, inasmuch as its rectification depends in no degree upon us or upon any possible change in the medical curriculum, but upon what amounts to a practical readjustment of the entire edifice of general education.

Want of early training in Physics and Natural Science.—The evil to which I now refer, as some of you have already no doubt perceived, is the extremely unprepared state in which the minds of most boys and young men are found at the time of their leaving school as regards the most elementary truths and methods of physical science, and of the observation of Nature. It is now more than a quarter of a century since this great defect in the English public schools attracted the attention of a Royal Commission appointed in 1861, and there is no reason to suppose that in Scotland at the time in question the state of school education was in this respect much better than in England. Evidence of the most convincing kind was given in 1872 before another Royal Commission to the effect that "the limitations of the examinations (under this revised code) to the subjects of reading, writing, and arithmetic unfortunately narrowed the instruction given in the elementary schools; and that this change, together with the lower standard adopted in the training and examination of pupil teachers and the curtailment of the syllabus of the training colleges, exercised a prejudicial effect on the education of the country." I am well aware, indeed, that in Scotland, and even in our own city of Glasgow, there are schools which have already made some considerable advances in the direction here indicated: and that in the old High School of Glasgow in particular there exists now a chemical laboratory such as would do no discredit to any university. But as regards the schools throughout the country, the advance has been so slow that for a long time to come our boys will leave their schools, and our young men will continue to enter the universities, in a state of great mental unfitness to grasp even the most elementary ideas of physical science, and therefore requiring more than ordinary care to ensure, at the very commencement of a medical education, the preparation in *physics*, which which shortly become all-in-all to the true *physician*.

Religio Medici.—I have now to ask your attention, for a very few minutes only, to a concluding topic, which I approach, indeed, not without fear and trembling, but which is of too much prominence and importance in itself, in connexion with the subject of this address, to allow of my passing it by without some reference.

Probably there may be some of you here present who have been led to take note of a proverb which I am bound to say I have not been able to trace to its source, but which I suspect to have been the growth of that mediæval period to which allusion has already been made in the course of this address: "Ubi tres medici, duo athei." I am not concerned in tracing out for you, even if I were able to do so, the most probable origin of this defamatory saying, nor shall I spend many words in venting my honest indignation upon it as a calumny and a reproach. It will be wiser and more profitable in every way to take it as it stands—as an example of what the late Earl Russell said of proverbs in general—"the wisdom (or in some cases the foolishness) of many," accentuated and condensed into a telling phase by "the wit of one." From this point of view it may be that there is something more or less worthy of careful reflection in this proverb, even if we should disown it in its literal acceptation. But I need scarcely say to those who are at all conversant with philosophical studies, that to have been accused of atheism in the middle ages may be quite the reverse of a real

reproach to any man or set of men. From the time of Socrates downwards, indeed, this reproach has been a part of the stock in trade of vindictive, even if sincere, ignorance and bigotry all over the world; and to have been tabooed with atheism is often, almost without qualification, a passport into the ranks of those who have kept alive the flame of the human spirit, tending, and often vainly, upwards, to escape from the jargon of scholastic controversies and the mephitic vapors of ecclesiastical strife. From this point of view it was inevitable —nay, it was essential—that the physician or naturalist, in so far as he really was or aimed at becoming such, should incur this reproach. The marvel rather is to us of this nineteenth century that those who incurred it should have done so little to deserve it. The reproach from a philosophical point of view, inconsistent with atheism, but not seldom conjoined with it, of tampering in an evil sense with magic, was sure to be launched in those days at men who professed to be successfully investigating the *secreta naturæ* by other than the most orthodox methods. And the prosecution and imprisonment of Roger Bacon on the one side, and of Galileo on the other, not to speak of the numerous "martyrs of science" both before and after these, will remain as an imperishable record of the blind and impracticable spirit of mediæval dogmatism, which, covering itself with the mantle of religion, stood athwart the path of the physician for hundreds of years. But although the condemnation on the side of godlessness came most easily and naturally out of the mouths of ecclesiastics, it is not by any means to be inferred that, either in ancient or modern times, it has been confined to them. Even in the kindly and thoroughly human word-picture, drawn for us by Chaucer, of the typical "Doctour of Physike," in the prologue to the "Canterbury Tales," line 440, it comes out that while

> Wel knew he the old Esculapius,
> And Dioscorides and eke Rufus,
> Old Hippocras, Hali, and Gallien,
> Serapion, Rasis, and Avicen,
> Averrois, Damscene, and Constantin,
> Bernard, and Gatisden, and Gilbertin—

yet, alas! as a sad balance in the way of defect to all this learning of ancient, and also of then quite modern date, it is quaintly and humorously added in a single line, without even an attempt at ampification or excuse, that

> His studie was but little on the Bible.

This, then, is the position and the stigma that we have to deal with as physicians or students of Nature and science in the present, as in all former ages, in proof of which you will allow me simply to refer (without at all dwelling upon it) to an article in the actually current number of the Contemporary Review. I will therefore close this address with a very few thoughts of my own on the subject, not at all in the way of controversy or of recrimination, but as expressing the matured convictions of a lifetime on a theme which must needs come home to every man's conscience in the exercise of our profession, and on which I should despise myself if either the desire of saying smooth things, or the fear of saying the opposite, were to move me in the least degree in addressing an assembly like this.

That the active ministry of the healer, if fitly and diligently pursued in a serious and not a sordid spirit, cannot possibly tend to irreverence, or to what I would call essential atheism or Godlessness, is, I think, so obvious that it is only wonderful that any doubt should ever have arisen on the subject. That ministry is the ministry of the body, no doubt; physical, therefore, in its aim; physical also, to a certain extent, in its limitations; and I am not one of those who would argue that, because it is so, the physician is thereby degraded and straitened unless he is also constantly invading the province of the religious teacher. But when we consider how closely the one province trenches on the other, and, further, that in all the greater and graver crises of the lot of man on this earth—birth and death, sickness and health, moral contamination producing disease, and, on the other hand, physical disease inducing moral aberration, and, with or without these, positive insanity—we must acknowledge that the spiritual element in man is brought necessarily into the sphere of the physician's daily work. I am confident there is not a man in this room who will not emphatically agree with me in saying that a physician who even inclines towards irreverence as his habitual attidude of mind is thereby disqualified from performing aright the greatest of all the services that at times he can render to the sick.

The physician of the future will, I believe, be much more, instead of less, inclined to study the Bible than hitherto, and in this respect will differ greatly from the representative and typical "Doctour of Physike" of the "Canterbury Tales." But he will study it in the spirit of modern scientific freedom and of historical research, not under the influence of mere tradition and ecclesiastical authority. And thus only, as it seems to me, can the reconciliation of science and religion ever be brought about.

The physician of the future will do well if he remembers always the pernicious despotism which has been exercised over his own art (though in a minor degree) by the fetters of these dead orthodoxies, and will therefore be very slow to acknowledge their claims upon him to any more than a historical regard, even in the realms of theology. He will say to them, in the noble words of the Westminister Confession, which (but for the formula connected

with it in our Scottish churches) might almost be taken as the Magna Charta of Christian liberty in all such documents—"All synods and councils since the Apostles' times, whether general or particular, may err, and many have erred; therefore they are not to be made the rule of faith or practice, but to be used an help in both." But I desire you very specially to remark, as my own personal anticipation, shared, I have no doubt, by many of those now present, that the physician, in his character of student of Nature, will make, and in the end will establish, this claim to emancipation, not in virtue of any irreverent, much less atheistic, tendencies, but for the very reason that he has access to a revelation of God distinct from the written revelation, and requiring a wholly distinct method of investigation. In obedience to this call, he will, sooner or later, absolutely decline to walk in the leading-strings of ecclesiastical tradition. And in so doing he will (far from fulfilling old Dan Chaucer's satirical description) studiously insist upon the Bible, and especially the New Testiment, and, above all, the recorded life, words, and works of our Lord himself, as containing by implication the character of his emancipation, and the only perfectly free religious atmosphere as yet opened to human thought and inquiry. In proof of which I will now only submit one pregnant saying, with which, if it be indeed the word of God, all those who believe it to be such are bound to find all the other words of God in entire accord—"Henceforth I call you not bond-servants, for the bond-servant knoweth not what his lord doeth; but I have called you friends, for all things that I have heard of my Father I have made known unto you" (John xv., 15).

Correspondence.

THE TREATMENT OF ANÆMIA.

I have read with much interest the communication of DR. WILLIAMS, of Bay City, Mich., on the above subject, as published in the MEDICAL AGE, Sept. 10, page 389. But while I welcome the communication as one of merit, extending food for thought, my impression is that a careful examination of the subject should be made before accepting the doctor's conclusions in regard to pharmaceutical preparations, iron and chlorosis.

1. May we not put as much confidence in the reliability of the former as in the prescription that is filled at the drug-store? Is there any more inducement to cheat or commit fraud in the one case than in the other? Admit that an unscrupulous pharmacist does occasionally palm off a worthless preparation upon the medical profession. Does not the druggist at least balance the account by his sale of the vilest nostrums—by his occasional acting the part of the physician in making a prescription, or in surreptitiously filling and dispensing, on his own account, a prescription of a physician who is his patron, and by sometimes selling what he knows to be adulterated, or ancient and worthless drugs?

2. As to iron in anæmia, I was not satisfied with its results till I gave it on an empty stomach. Try it, doctor, an hour or a half hour before meals. As to the suggestion that the benefit may be from the chlorine when we prescribe the tincture of iron, the action being that of a germicide, or antiseptic, I cannot accept it.

The antiseptic craze that, for the last five years, has let the whole medical fraternity loose in pursuit of bacteria, is not in the line of progress, and has not elevated the standard of pathology, or of medicine.

I do not hesitate to assume that the microscopic forms of life found in connection with disease are the *result*, not the cause of the abnormal process.

As to iron, we know that it exists in the hæmatin of the red blood-globules, and that it is an absolute necessity to animal life; we also know that in anæmic conditions, especially in chlorosis, the red globules, and consequently the iron of the blood, are diminished.

And as a multitude of clinical observations attest that anæmia, in many cases, disappears, and that the blood regains its proper proportion of normal constituents after the administration of iron, we have, at least, a right to believe that it has been appropriated and assimilated by the blood, and that its use is rational and scientific.

3. In chlorosis, the blood is often profoundly changed, and if any disease is to be called a blood-disease, this is the one. But the chief fault is with the nervous system. In fact, all diseases are of the nervous system. That is, all the morbid phenomena that our senses can appreciate are manifestations of deranged nerve action.

Adjusted antagonism is the basis of life. On this principle hinges the natural laws of the physical world about us, as well as those of the little world within us. From the nice and normal adjustment of the mechanism of the body, we have physiological action; derange the adjustment by a change in the innervation of any portion of the anatomy, and we have pathological action. And the adjustment in man is suited to harmonious action in a triple organization—the human, the animal, and the organic or vegetable.

In the animal economy a derangement of the nerve forces is often strikingly apparent. We see this in the wrist-drop of lead-poisoning, the extensor muscles of the fore-arm being par-

alyzed. So we see it in facial paralysis, ptosis, strabismus, torticollis, etc., etc. And the want of balance in the nerve force that controls associated and antagonizing muscles, is the initial cause in POTT'S disease—in lateral curvature of the spine—in hip-joint disease—in flexure of the leg upon the thigh—in club foot—in bunion and many other orthopedic deformities.

That all diseases and disorders of the mind, where function is involved, and all diseases of the brain, involving morbid anatomy, have their cause in derangement of local nerve forces, I do not doubt. And I have the same view of the pathological conditions that exist in the whole range from the mild fever to the malignant tumor, the initial tumor being, generally, in connection with the vaso-motor or organic system of nerves. On this basis for pathology the physician, not the surgeon, will treat cancer, and treat it successfully.

But we will return to DR. WILLIAMS and chlorosis. Can we accept the idea that this disease is the result of morbid thought or amorous desires? I think not. There is as much, and probably more, trouble at the terminal end of the menstrual line than at its beginning, the menopause being the most critical period in female life, though our text-books give but a mere trace of treatment. Not only the peculiar and serious conditions incident to menopause, but a score of diseases, well known by name, confront us to-day and defy the most skillful. Why? Because the whole structure of medical practice has been built upon sand.

HIPPOCRATES, 2400 years ago, did not simply blaze the trees; he built the road along which, in semi-darkness, we are now plodding. He knew nothing of anatomy, physiology, or pathology; he even supposed that the blood-vessels originated in the heart; yet he could see a man bleed to death, and very naturally conclude that the blood was the basis of life. Here was the fatal error from which came the idea that many of our diseases were of the blood, as has been taught in connection with typhoid fever, diphtheria, small-pox, etc. It was fifty years after the time of HIPPOCRATES when ARISTOTLE discovered the motor nerves, and another half century elapsed before HEROPILAS discovered the nerves of sensation.

Since that time, 2300 years ago, the progress made along the line of the nervous system has been at a snail's pace, and millions of people have died from consequent ignorance of the physician.

We now know that the centre of animal life is not in the heart, nor the blood, but in the medulla, at the base of the brain. Do we fully appreciate the importance of this anatomical fact?

But I will close here by thanking DR. WILLIAMS for his article, for its drift is in the right direction; he proposes to think for himself. We should all do this before accepting the conclusions of the past.

C. W. CRAM, M. D.

DAVENPORT, IOWA.

DRUGGISTS VS. PHYSICIANS.

If self-protection is the first law of nature, then we certainly have arrived at a point when the medical profession should stand up and exercise this right in behalf of its own welfare.

Physicians have from time immemorial been a most patient and long-suffering class of men, and it is high time they put forth their hand and exercise the power in their possession. I refer to the patent medicine business and the part which the drug-store men take in introducing these nostrums to the public. It may be that at the present time the manufacture of these stuffs cannot be prevented; but one thing can be done. These druggists who, all over the country, have their shelves laden with them, whose stores are illuminated with their literature, and whose goods, almost to the very prescriptions which we order filled, are wrapped in their advertisements; these druggists who with wide-open mouths beseech us to satisfy their hunger by a liberal prescription patronage, and who at the same time are busily engaged in their endeavor to injure our business by almost forcing the public to purchase their patent medicines; these men can be made to understand that they cannot reap a profit from these goods and at the same time largely increase their income by filling prescriptions written by us. Men who reap harvests from the patronage of the physician should be satisfied with that patronage, and not endeavor to "kill the goose which lays the golden egg."

Let physicians give them to understand that they cannot with the sanction of the profession, carry on both branches of the business. If they are not willing to lay aside the patent medicine business, then the physician can very easily lay in, from the wholesale house, a stock of drugs, fill his own prescriptions and thus save to himself the profits of not only his medical skill, but an additional profit on the drugs, which, by the way, is not small, should his charges correspond with those of his druggist.

Some drug men excuse themselves by saying that they are obliged to carry certain patent medicines because they are called for by the public, but at the same time are making every effort to introduce and advertise any new or old patent medicine whose agent appears in town. They induce postmasters to distribute their pictures, they pay editors to recommend them, they hang their advertisements in their stores and climax the whole by personal solicitation, and then finish up the matter by patting the physician on the back and reaching him a new blank prescription book.

This thing has gone quite far enough and it

is time that every physician give his druggist to know that he considers the patent medicine business at variance with his own, and that the druggist who handles it is his business opponent, and that he cannot support the hand which is raised against him.

This patent-medicine trade has flourished first because the druggist has done all in his power to advance it, and second, because the physician has quietly allowed his business to be taken out of his hands by the very men who should protect it. Much can be done by the physician; the power is in his hands; only let him exercise it and a change will take place which will materially increase his office practice and at the same time materially diminish the sale of stuffs, the profits of which go into the pockets of the manufacturer and the druggist.

X. Y. Z.

PICHI IN NEPHRITIS AND CYSTITIS.

The patient, Mr. H. D., 31 years of age, was first attacked with inflammation of the bladder 7 years ago. He was then working as a moulder, in the Iron Works in Oshawa, Ont., and doing heavy lifting. He was treated by a number of the best physicians in the city, all to no effect. Discouraged at the result, he abandoned all treatment, though suffering from recurring attacks at intervals of three or four months. It is pertinent to add that he is a man of correct and generally temperate habits. After coming to Michigan, two years ago, he remained free from attacks until last April, when the old trouble returned with redoubled vigor, and I was called to the case. I found him suffering the most agonizing pain, in the region of the right kidney, and extending along the ureter to the bladder. The urine was scanty, highly colored, of high specific gravity, and loaded with mucus and triple phosphates. There was neither pus nor albumen present. I administered morphine hypodermically, for temporary relief of the pain, and prescribed an anodyne diuretic mixture. As soon as the effect of the morphine passed away the pain returned, and at subsequent visits I applied sinapisms performed catheterization, and washed out the bladder with a carbolized boracic acid solution, which afforded slight relief. Then I prescribed kava kava, but the results were unsatisfactory. As a *dernier ressort* I put him upon ten drop doses of fluid extract Pichi (P., D. & Co.'s), every four hours. The relief was almost immediate. This was continued till one ounce was taken. My supply being exhausted, I discontinued the remedy, and the patient has continued well, and able to work ever since. I have reason to believe that the Pichi has effected a permanent cure in this case.

W. FLAGLER, M. D.

IMLAY CITY, MICH.

THE PHYSICIAN AND POLITICS.

The editorial in the last issue of the AGE was very timely, but of what avail will it be should the profession give it their mere passive endorsement? We are now on the eve of an election, and if it is the intention to attempt anything in the way of medical legislation during the coming winter, let those interested begin to cast about for such candidates for the legislature as will be likely to carry weight. The liquor interests of our State are already being provided for after this manner and it is high time for the profession to begin the move. Let the medical societies take hold of this matter. The first thing which they should do is to prepare a Bill, and when the candidates of the political parties are in the field, let them select therefrom, regardless of party affiliations, the men of most power. Present to these the demands of the profession and exact, as a condition of the support of the physicians of the district, a pledge to vote for a Bill containing these demands. Should such a pledge not be given let those asking it make their weight felt at the polls, against the candidate refusing. For the present it may be difficult to secure pledges of this kind from candidates, but once let the force of those asking them be felt in the form of votes and work on election day, and another year will command greater attention. We command so little attention now because we lack the organization which ensures a strong pull, a long pull and a pull altogether.

M. D.

The Medical Times says there is a surgeon in its city (Philadelphia) who is not more learned, skilful or prudent than his fellows, but who carries his patients by the sheer force of his vitality, through crises where death would almost inevitably ensue with other operators. Uncle Toby said, "By G—, you shan't die!" to the lieutenant. And so this doctor says, and his belief in the patient's well-being is so evident that the poor sufferer takes heart, and actually *does* recover, even when, according to all the probabilities he ought to die. There is a goodly-sized moral in all this. Certainly the lugubriously inclined should seek some other vocation than medicine.

As was to have been expected, the jocular manner in which the medical press of this country treated the suggestion of the eastern crank who wants the profession to adopt a uniform, is regarded by our English contemporaries as a serious discussion of the question. The Lancet, for instance, seriously hopes that that no such thing as a uniform will be adopted and proceeds in all seriousness to give its reasons for opposing it. It does really seem that a surgical operation is necessary to make our transatlantic brethren understand a joke.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., SEPT. 25, 1888.

Editorial.

URÆMIA.

In the Bradshawe lecture of this year, delivered before the Royal College of Physicians, DR. WILLIAM CARTER took as his subject Uræmia, and gave a presentation thereof of much interest to the general practitioner. The condition is one the symptoms of which are so very varied as to be somewhat confusing, and thus demand careful consideration. Grossly speaking, uræmia is the altered condition caused by the accumulation in the body of poisonous products which should be eliminated by the kidneys. This accumulation may manifest itself very differently in different persons; in some violent and persistent vomiting may be the only symptom, the brain remaining clear; in others diarrhœa is superadded; and in others coma supervenes. Some, again, are convulsed, others become delirious, others asthmatic and in others various nervous disturbances of a capricious nature appear, showing a diversity of effect on the nervous centres.

A number of attempts to explain these manifold manifestations have been made; TRAUBE'S theory is the most plausible. He holds the immediate effect of the poison to be cerebral anæmia, which he maintains never occurs without cardiac hypertrophy and blood dilution. These combined conditions induce cerebral œdema, which in turn, by pressure, causes anæmia. On this ingenious hypothesis it is easy to conceive how the paralysis or spasm may be confined to one side or one limb, and why instead of being permanent it may pass away, the pressure not be uniform throughout, the œdema often, also being localized. We have no absolutely certain post-mortem signs that enable us to say that either dilatations or spasms of cerebral vessels have occurred during life in any case of Bright's disease; but as, at any rate, vesicular spasm certainly occurs in other and sometimes strangely limited parts, where the death-like pallor which is produced can be plainly seen, it is at least not improbable that it may also occur in some of the vessels of the brain, where, from the nature of the case, it cannot be seen. The "dead hand" is regarded by some as common enough to be ranked among the marked and early signs of uræmia.

After referring to and briefly discussing the most recent endeavors to unravel the complexity of the subject of the specific toxic element in uræmia, by suggesting the office of the animal alkaloids which may be developed in the course or condition of uræmia, DR. CARTER goes on to the question of treatment. His remarks under this head so fully indicate his conception of the immediate pathological condition which obtains, that we feel warranted in reproducing them at some length.

What have the newer studies of recent years taught us? Have they led to any newer and better methods of treatment? It must be admitted that in this last respect research has largely served, in this as in many other departments, but to emphasize and conform the value of practice already established. But it has done more: it has pointed out early symptoms, the importance of recognizing which cannot be overestimated, and by establishing the relations between these and defective renal function has driven home upon the medical mind the necessity of determining by frequent examination the relation between body weight and the amount of urinary constituents. The accumulation of toxic products in the blood and tissues is often very slow, and the slighter the warning afforded by early symptoms the more valuable will treatment be likely to be. The principles on which practice must be based consist mainly (1) in cutting off one or another of the urinary poisons at their source now that we know to some extent what these poisons consist of, and whence they are derived. Under this head we recognize the great importance (*a*) of limiting potassium salts both in food and in medicine, (*b*) of employing the simplest and most easily assimilated diet such as milk, (*c*) of bowel disinfection, (*d*) of maintining at its best the functional activity of the liver, (*e*) of care in the nature of nutrient enemata when these are required. (2) In directly and indirectly withdrawing or diluting the uræmic poison, by (*a*) venesection, (*b*) purging, (*c*) sweating, (*d*) transfusion. (3) By burning up the poison, by (*a*) active exercise, (*b*) the administration of oxygen or oxydisers. (4) In antagonizing the poison, or at least overcoming special symptoms.

Reducing the above principles to practice, the first caution inculcated as to potassium salts would lead to the substitution of sodium bromide and other sodium salts for the corresponding ones of potassium, as the former have only one-fortieth of the toxicity of the latter.

According to BOUCHARD, one-fifth of the total toxicity of normal urines is due to poisonous products reabsorbed into the blood from the intestines, and resulting from putrefactive

changes which the residue of food undergoes there. Can the formation of such products be controlled? If a healthy man is fed for a given length of time on an ordinary mixed diet, and then for an equal length of time on milk alone, the urine of the second period is much less poisonous to animals when injected into their veins than that of the first, hence the great value of milk as an article of diet to the Brightic. But this value was firmly established by DR. GEORGE JOHNSON from clinical observation, and has been fully recognized for many years by all practical physicians.

The compact and small fæcal residium from milk, the deficiency of this residuium in biliary coloring matter, and the small proportion of potassium salts in milk, all help to explain its utility.

But it sometimes happens that it cannot be digested; the question then arises as to whether the destruction of biliary coloring matter and of the soluble products of intestinal putrefaction can be effected even when dietetic means fail. A practical answer seems to be given by such experiments as the following: If a healthy man is fed during a given period on an ordinary mixed diet alone, and during another and equal period on a similar diet, *plus* certain agents capable of disinfecting the contents of the lower bowel, there will be as great a difference in the toxicity of the urines under the two sets of circumstances as there is under a milk and non-milk diet respectively, it being much less when the disinfectants are used. The best bowel disinfectants are naturally those which pass through the intestines unchanged, exercising their local effects on the way, and the employment of these is suggested for the purpose of cutting off one cause of indirect blood contamination at its source. The idea is a valuable one and its application capable of and already receiving a wide extension. Naphthalin, iodoform, and animal charcoal, being among the least soluble of non-poisonous antiseptics, are on that account chosen by BOUCHARD, and recommended for the purpose indicated. Our choice happily is not limited to any one mode of administering these, or even to these substances alone, or the utility of the principle would be seriously curtailed. That they will arrest putrefactive changes in the bowel, and the last mentioned diminish the coloring matter of the urine, is certain, but although a healthy man may by an effort take a mixture containing the large quantities of them required for the purpose indicated, it is unhappily often otherwise with the subjects of Bright's disease, and especially with those in whom uræmic symptoms are present. The stomach is so abnormally irritable in them, that even the blandest nutriment is often rejected, and almost all medicines share the same fate. Occasionally, however, the disinfectants are tolerated, and when they are distasteful in one form, the manifold resources of modern pharmacy can present them in others that are not so. It is well to know that even iodoform and naphthalin can be so presented as to be perfectly free from odor, while iodol has no odor to correct.

The practical value of purgation and diaphoresis in warding off the severer symptoms of uræmia seemed to have been so firmly established that it would not have been necessary to insist upon it if BOUCHARD had not spoken in somewhat doubtful terms of it. He critically examines the effects of purgation, for example, compares the small amount of urea drafted off in the intestinal fluid with that eliminated in the urine, and speaks of the alternate dehydration by purgatives, and subsequent hydration by means of imbibed liquids as a "dangerous game," but at the same time admits that diarrhœa must abstract poison from the blood, founding the admission on the reduced toxicity of the urine of a healthy person secreted during the four hours of a medicinally induced purgation. But we have better evidence than this, for we see constantly headache and even more alarming symptoms rise and fall in the Brightic, according as diarrhœa is suppressed or established. An empirically established fact of this kind is quite as reliable in practical medicine as any other, and would remain as valuable if it could be proved that no poison at all were eliminated by the bowel. In this instance it is somewhat difficult to see the force of BOUCHARD'S criticism. Urea is not the poison which causes the symptoms. Whether it is or is not discharged by the bowel is not, therefore, of much consequence. What the true poisons are, except potassium salts and and coloring matter, is unknown; it must be possible, therefore, that they may be discharged from the intestine, even if it were established—which I do not admit to be the case—that urea in large amount cannot be.

Some twenty years ago physiologists learnt from DR. PARKES that severe bodily labor had but slight and sometimes no effect in increasing the amount of nitrogen eliminated, a fact confirmed by all subsequent observers. Muscular exertion and muscular waste, muscular waste and increased nitrogen discharge, had been so long considered as necessarily associated causes and effects, that nothing but the rigidity of the proof advanced by PARKES dispelled the belief. The old superstition still clings, for it certainly was somewhat of a surprise to be assured that the urine of one working hard in the open air was less toxic to others, and that therefore the urinary constituents, while still existing in the blood, were less toxic to himself than that of the same man when resting at home. Another experience gives the explanation: "I have seen a sojourn in compressed

air diminish the urinary toxicity by more than one half," says BOUCHARD. The only factor common to the two conditions of hard work in the open air and no work in compressed air is increased oxygen consumption. On such facts as these, JACCOUD founds his treatment of Bright's disease. He gives inhalations of oxygen, 10 litres three times a day, allows only the simplest possible food, and promotes tissue exchange with the inhaled oxygen by a systematic application of douches followed by frictions. This method of treatment is as useful in practice as it is rational in theory, and the readiness with which pure oxygen can now be obtained in a condensed form, and the ease with which by means of a gasometer and inhaler it can be administered in exactly measured quantities, and with any required degree of dilution with atmospheric air, ought to insure its utility being extensively tested.

It is more difficult to decide on the utility of antagonizers of uræmic poisons. Morphine, for example, though much extolled by DRS. LOOMIS and DAVIS, as the most efficient agent, when hypodermically injected, for controlling uræmic convulsions requires to be used with very great caution where it is used at all, as cases are mentioned by DR. WOOD, of Philadelphia, where its employment was shortly followed by death in coma.

DR. CARTER feels quite sure that the agents which give most relief in uræmic asthma are those which relax vascular spasm; and of them the most generally useful is ozonic ether. From half a drachm to a drachm of this will nearly always mitigate the severity of the dyspnœa, and sometimes entirely remove it. In one case an ounce of whisky in hot water gave sleep every night, and prevented the spasm. Another patient, though relieved by similar means, found most benefit from free friction of the chest and arms, and by having them then wrapped up in hot cotton wool. When we know the exact nature of the poisons which produce this and other symptoms, our remedies will be less empirical.

RELIGIO MEDICI.

The abstract which we give in our present number of PROFESSOR GAIRDNER'S address before the British Medical Association will, we are convinced, be read with much interest. Part of the address, while chiefly of a local interest, contains, nevertheless, food for thought, regardless of latitude or longitude, while the remarks with which the masterly production closes have a ring which must resound throughout the professional world. It has come to be regarded as rather old-fashioned to associate in any degree the study of nature, and particularly her manifestations in the human body, with sentiment, and particularly with religious sentiment. PROFESSOR GAIRDNER has displayed considerable boldness in referring so pointedly to the subject of religion before a gathering of scientists. We do not think, however, that this section of his address was at all out of place. In its broadest sense religion cannot be ignored by any right-thinking man, and those who seek to explore the arcanum of nature cannot but feel the weight of PROFESSOR GAIRDNER'S remarks. The sense of the existence of a something beyond, is ever present.

Medical men are apt to be regarded as the most hopelessly skeptical of all the professional callings. It is true they do not seem to be very strict adherents to any particular religious creed, but to argue from this that their calling tends to eradicate the innate religious feeling, is wrong. More than the members of any other calling, perhaps, they are indifferent to theological dogmas, but this by no means arges their indifference to the essence which these dogmas are, perhaps, too apt to becloud. Whether he is confessedly so or not, the conscientious physician is a religious man, and if he cannot be classed as religionist, the fault is most likely to lie in the fact that religious teachers are too prone to advance their theologies (human creations) to a plane of equal importance with that occupied by religion itself. Theologies may have lost their hold on the medical man. They are human creations. The essence, however, religion itself, still controls. His personal life and duties would be shorn of their highest sanctions if it were not for faith in the "things which are not seen."

Notes.

If DR. I. N. LOVE, of the Weekly Medical Review, isn't very careful he will wake up some of these fine mornings and find himself a funny man. Of course he is built that way, somewhat, but then, you know, it isn't in proper form for the "leading medical journal of the southwest" to foster any such propensity. We really hope he may never, in one of those fits of absent-mindedness to which geniuses are prone, suffer himself to become as funny as it is even in him to be. His remarks on the cucumber as an article of diet, in a late number of his otherwise able journal, though a little strained, are nevertheless really so suspicious of being funny that should they be repeated, "while hoping for the best we shall fear the worst." Say now, Love, do come off. You really can't afford to blast a young life or jeopardize a brilliant future, in this reckless manner. And what's more, you ought to be a little considerate for the profession.

Yellow fever, which has been and still continues to be endemic and very deadly at Jacksonville, Florida, threatens to become epidemic throughout the south before frost appears. The report of the panic which prevails in certain sections are really alarming, and, unquestionably, much of the fatality of the disease is due to the fright which has seized the people. It is, of course, a very easy matter to volunteer advice, and especially at a distance from the dreadful scenes which are now transpiring in the southern states, but it is always in order to admonish to calmness, and to control of the emotions. The medical profession, true to its record of bravery and self-sacrifice in hours of peril, is doing nobly and already a number of brave hearts have laid their lives on the alter of humanity. The stricken people are meeting with ample support, in the way of contributions from the north.

The Congress of American Physicians and Surgeons, the first triennial meeting of this new organization, was held at Washington last week. The Congress is composed of eleven of the national associations of specialists. It is organized on a high plane and it is apparent from the names of those who were most prominent at the late meeting that one of its objects is to afford a resting place for the very large section of the profession of this country who could not make themselves at home in the American Medical Association. The proceedings of which the Medical Record furnishes a characteristically able and full report, show that medical politics had no place in the meeting, thus exhibiting a marked contrast to the A. M. A. The Congress is, furthermore, not hampered or dominated by any such instrument as the Code of Ethics by which the A. M. A. is supposed to be governed.

SENATOR PLUMB has introduced a bill which offers a reward of $100,000, for the discovery of such a remedy for yellow fever as will reduce the mortality to 2 per cent., among the cases treated in the United States. The remedy shall be copyrighted for public use. The bill requests all persons who have been treated by any copyrighted remedy and who have recovered from the disease, to file a sworn statement to that effect with the Surgeon-General of the Army. Similar sworn statements are requested from doctors and nurses. When the Surgeon-General shall discover that 981 recoveries out of 1,000 cases in which the remedy has been tried, the $100,000 will be paid to the discoverer of the treatment. It is questionable whether the passage of this bill can stimulate the profession to do more than it has already done in this direction.

The Medical Record reports a truly wonderful occurrence. MRS. BENJAMIN BAUGH, of Atlanta, Ga., it says, cut the hair of her little two-year-old child and saved one curl about an inch and a half in length. Shortly after the child died and the mother in opening the box in which she had placed the ringlet, found that it (the ringlet, of course) had grown to be two feet in length. No one, it is alleged, had touched the box and there is no doubt that the curl was the same curl that MRS. BAUGH originally put there as a curl an inch and a half in length. There are some really wonderful things transpiring in these latter days. Both MRS. BAUGH and our esteemed contemporary are still at large.

An Arizona man had been inveigled into subscribing for a religious paper, but soon discovered wherein he had made a mistake. He accordingly wrote the editor to stop it. Among the reasons he gives, is one referring to the "ads," wherein he accuses the editor of not having played a square game. He says: "I took half a dozen of the 'dead shot' pills you puffed up in a reading notice, week before last, and the next day I was so sick that all the doctors in the town published bulletins about my approaching death, and the boys said I had the jim-jams. For these reasons I have determined to quit your paper and read the Howler only. As I know it always lies unless it paid to tell the truth, it can't lead me into temptation."

A DR. WILLIAM INGALLS, of Boston, has made himself famous by refusing to issue daily bulletins detailing the conditions of a noted actor who is known to be seriously ill and who is under the doctor's care. He, moreover, refuses to give the reporter the slightest satisfaction. The only item which that ubiquitous and persistent outgrowth of the latter-day civilization can make out of his calls on the doctor, is one descanting on the old fogyism and the obstinacy which characterizes the modern reputable physician. In the meantime the public is kept in ignorance of how the actor's pulse beats and how his bowels move.

RALPH WALDO EMERSON was reported a very wise man. He said: "Trust men and they will trust you." Many have tried this plan to their sorrow, and hence have amended the saying by striking out the word "trust" where it appears the second time and inserting the word "bust." Thus amended the saying becomes a better guide, in business at least.

Small-pox has broken out with great virulence in Buffalo, and several cases are reported from Toronto. This is strongest admonition to the cities of the West, and more particularly to those lying on the great lines of travel. Let the physicians of these cities make immediate arrangements for supplies of vaccine virus.

Here is another idol shattered: The Electrical Review says the day will come when a lightening rod on a house will be regarded in the same light as a horse-shoe over the door.

Book Notices.

ABDOMINAL SURGERY. By Hal C. Wyman, M. S., M. D., Prof. Priniciples of Surgery Michigan College of Medicine and Surgery.
Detroit: Published by George S. Davis. Leisure Library Series.

This work is intended for a guide to the practitioner who hopes to do his duty in abdominal surgery, and as a reference book for the student who wishes to acquire a knowledge of surgical art.

There are several larger works upon this subject to which the student or practitioner may turn and read when he wishes to acquaint himself with the history of abdominal surgery, but, if he has a case of obstruction or gun-shot wound, this work will tell him how to make the preliminary surveys, so to speak, before undertaking an abdominal operation.

All of the work described in PROF. WYMAN'S book is first done upon the lower animals, with the object of having the novice learn on them how to make his incisions and take his stitches, before he operates on a member of the human family.

An experiment, as popularly understood by that term, should never be performed upon a member of the human family while there are brutes capable of being used instead.

Then when one has learned how to do the work he may proceed on man.

That portion of the work which relates to the treatment of gun-shot and bayonet wounds is especially interesting.

The treatment of cancer, gastric and intestinal, is fully discussed.

Numerous experiments detail the results which follow blows upon the abdominal wall. Rupture of the bladder by external violence is also treated experimentally.

The work is quite a departure from the ordinary course of surgical literature. It gives much more attention to detailing of methods than is commonly done by surgical writers.

The pathology is generally based upon knowledge derived from experiments made upon lower animals.

It is a book for the surgical laboratory. In literary character, while it shows a lack of attention to details, which, attended to, would have made the reading more pleasurable, it displays a directness which takes one right to the point, and a robustness which carries with it conviction.

As a book, it shows that it is made up of notes written and formulated at the bedside or on the operating table. The publisher has done his part well, and has dressed the work becomingly.

A REFERENCE HANDBOOK OF THE MEDICAL SCIENCES. Embracing the entire range of scientific and practical medicine and allied science. Volume VI, by various writers. Illustrated by chromo-lithographs and fine wood engravings. Edited by Albert H. Buck, M. D. Complete in eight volumes. Price per vol., muslin, $6.00; sheep $7.00; half morocco, $8.00.
New York: William Wood & Co.

In noticing the previous volumes of this in many respects the greatest work ever issued from the medical press, we have endeavored to convey a conception of its scope. Anything in the way of a critical review of a work of the character and dimensions of this would be clearly impracticable within the limited space of even the largest medical journal. It must suffice to say that in the volume before us every subject of a medical or collateral nature, alphabetically classed between P and T, is treated with encyclopedic fullness by authorities on each. The subjects of scarlatina, septicæmia, sewage and sewerage, selected at random, are illustrative of the combination of the scientific and the practical which characterizes the volume throughout, and one need examine the articles only superficially to become impressed with their great value. The chromo-lithograph illustrations are works of art, and the wood cuts reproduced, as they are, on paper of the finest quality are equal in effect to steel-engravings. When the eight volumes, of which the work is to consist, have been issued they will constitute a library of invaluable worth.

A TREATISE ON FRACTURES AND DISLOCATIONS—Volume II.—Dislocations. By LEWIS A. STIMSON, B.A., M.D., Professor of Clinical Surgery in the University of the City of New York; Surgeon to the New York, Presbyterian and Bellevue Hospitals; Corresponding Member of the Société de Chirurgie of Paris.
Volume I. (Fractures) contains 582 pages, with 360 illustrations. Price per volume: Cloth, $3.00; leather, $4.00. Complete work: Cloth, $5.50; leather, $7.50.
Philadelphia: Lea Brothers & Co.

The appearance of this volume marks the completion of the author's original plan of preparing a work which should present in the fullest manner all that is known on the cognate subjects of Fractures and Dislocations. The volume on Fractures, which appeared a few years since, assumed at once the position of authority on the subject, and its companion on Dislocations will doubtless be similarly received. The plan of issue in two volumes, separately indexed, at the cost of one, places it within the power of all to obtain a convenient and authoritative work on these common and troublesome emergencies.

Medical Progress.

KATALYTIC ACTION OF ELECTRICITY; ITS PRACTICAL VALUE IN RHEUMATIC AFFECTIONS.—It has been long recognized that the effect of the electrical current on animal tissues comprises something more than the stimulation of nerves and muscles. Remak first called attention to the alteration produced in living tissues by the passage of the galvanic current, and applied the name "katalytic" to this function. Experiment has shown also that fluids may be made to pass into the body by means of special electrodes adapted to the purpose, a property of the electrical current which has been termed its "kataphoric" action. Whether the latter is an element in the production of the katalytic action, or whether vaso-motor changes, improved nutrition by stimulation of the trophic mechanism, increased tissue-metamorphosis, osmosis, or molecular changes, each or all, are important factors, cannot as yet be accurately determined; the conditions are too complicated for satisfactory experiment and analysis. The practical bearing of the question lies in the fact that therapeutic experiment has demonstrated beyond a doubt that such changes may be produced in the tissues as to cause improvement and even recovery in certain disorders not yielding to other treatment. Prominent among these disorders are subacute changes in or about the joints, of rheumatic origin.

Erb* quotes the observations of Remak, Rosenthal, Meyer, Cahen, Cheron, Weisflog, Benedikt, Onimus, Legros and Erdmann, as well as citing his own personal experience, to illustrate the practical benefit of electricity as a therapeutic agent in various forms of arthritis, including acute and chronic rheumatic and traumatic affections. It appears proved that exudation and pain may be made to disappear, and the normal mobility of the joints restored, in cases where other remedies have failed. Rosenthal and Bernhardt† allude to the effects of the galvanic current on rheumatic affections of muscles and joints, choosing the subacute and monarticular joint affections as the most promising objects of experiment. They recommend especially the galvanic current, considering faradism also valuable as a counter-irritant, as well as faradization of neighboring muscles. They state that even in acute rheumatism the faradic current and the wire brush have been found to lessen pain and shorten the disease, but throw doubt on its supplanting salicylic acid and other remedies. They allude to the passage of galvanism or faradism as promoting absorption of joint exudation and lessening the pathological processes in the neighborhood of the joint (fasciæ, tendons, periosteum and muscles). Beard and Rockwell‡ state that electricity has been employed with more or less success in rheumatism from the early periods of the history of electrotherapeutics, and add that this is the disorder against which (next to paralysis), the original experiments of electrotherapeuticians were most frequently directed. They lay stress on the importance of the general application of electricity, inasmuch as the disease is constitutional, and recommend general faradization quite as strongly as local application. They find subacute and acute cases far more amenable to treatment than chronic. For the local treatment galvanism and faradism are recommended alternately. The general application is said to increase the flow of urine, to cause generally more or less exhilaration, and to relieve pain; the local application relieves pain, reduces inflammation, and when effusion has taken place, causes absorption; the latter being affected by both currents, in some cases more powerfully by the galvanic. The caution is added that if the currents are used too strong or too long, the pain and inflammation may be increased. In the cases quoted by these authors, general faradization seems to have been the chief agent, although in one case the application was made with special reference to the diseased parts. In myalgia, or muscular rheumatism (characterized by pain on movement, diffused through the muscles, and caused usually by exposure to cold and dampness), local faradization with the mild current either stabile or labile, usually causes relief in a short time. Stabile galvanism may relieve at once; severe applications may increase the pain. They add: "Of the large number of cases that we have treated, nearly all have been relieved by one, two, or more applications. A single application with a mild current, prolonged for one or more hours, may sometimes dissipate an attack of myalgia." In one of the two cases cited, general faradization was used in a case of several years' standing, cure resulting in three weeks. In another case, muscular rheumatism existing in the hips and limbs for a month, recovered in a fortnight under daily faradization of the affected parts. Duchenne§ reports cases of muscular rheumatism, rheumatic paralysis, and rheumatic contracture, cured by the use of faradism.

Other authorities could be cited to confirm these observations, but enough have been mentioned to show that the subject is one which has attracted universal attention among electro-therapeuticians from the first. It seems, therefore, somewhat remarkable that the profession in general have made so little of this branch of electrotherapeutics, even while the application of electricity has been greatly in vogue for all forms of paralysis, for which it has for a long time been applied indiscriminately, sometimes in accordance with, but oftener in defiance of scientific principles. The experience of the writer has been most satisfactory in the treatment both of muscular and articular rheumatism; successful results have followed, almost without exception, in the cases where it has been tried; a careful selection of subjects having contributed largely to this result. Long-standing, chronic cases, such as deforming arthritis, have not been operated upon, for in no such case has the prospect of recovery seemed sufficient to warrant the trial. Cases of acute rheumatism, again, have hardly seemed to me appropriate subjects for this form of treatment, in which opinion I coincide fully with Rosenthal and Bernhardt, quoted above. Indeed, far from electricity replacing

*Handbuch der Elektrotherapie. Laipzig, 1882, p. 251.

†Elktrizitätslehre für Mediziner und Elektrotherapie. Berlin, 1884, p. 439.

‡Practical Treatise on the Medical and Surgical uses of Electricity. New York, 1878, p. 541.

§De l'électrisation Localisés, p. 88.

internal remedies in the treatment of acute rheumatism, it is to be feared that more harm than good would be brought about by its use.

The cases selected have been limited to subacute, monarticular rheumatism, to muscular rheumatism of not too long standing, and to allied conditions. In every case the electricity has been applied locally. I would not underrate the value of general faradization for cases of general debility resulting either from persistent rheumatism or from other causes. I do not, however, feel convinced that the root of the disease, as such, is directly attacked by general faradization as implied by Beard and Rockwell. My experience leads me to emphatically endorse the caution of Beard and Rockwell regarding excessive length and strength of application, especially in acute cases. A medical friend, suffering from subacute rheumatism, having found the faradic current extremely efficacious in reducing the swelling of the finger-joints, gave himself a sitting of forty-five minutes with a strong current, and produced thereby a decided accession of pain, stiffness and swelling. In one case of muscular rheumatism, again, quite acute, the galvanic current was given by my advice, and ten cells of the chloride of silver battery, applied ten minutes, aggravated the trouble so greatly as to cause its discontinuance. The exact amount of electricity received in the case cannot be accurately determined, since no galvanometer was used.—G. L. Walton, M. D., in *Boston Med. and Surg. Journal.*

THE SUCCESSFUL PALLIATION OF HAY FEVER.—A correspondent of the Medical News writes as follows:

It may interest some of your readers to hear the details of a palliative treatment of hay fever which has secured almost entire relief to a patient who had submitted to a thorough, yet unsuccessful, course of radical treatment with the galvano-cautery, caustic acids, chisels, saws, etc.

The drugs employed, atropine and cocaine, are well known in connection with this disease, but the mode of their use may be novel. The patient is directed to take $\frac{1}{200}$th grain of atropine sulphate on rising, and to repeat the dose every four hours till bedtime. If any dose fails to check running from the nose, it may be repeated in half an hour. Should dryness of the nose continue longer than four hours, the atropine may be withheld until renewal of the flow. Incipient dryness of the mouth is a safe and convenient indication to use in limiting the dosage of the drug. The effects of atropine are two: First, it diminishes exhalted peripheral sensibility, and thus renders the nose less sensitive to the special irritant cause of hay fever; sneezing is diminished or abolished, and with it a train of distressing symptoms. Secondly it checks the watery secretion of the nose, and thus prevents washing away of the cocaine before it has practically reached the surface to which it must be applied.

For the local use of cocaine the wire cotton-carrier is the most convenient instrument yet devised. It is made of spring-tempered German silver, or brass wire one-twenty-fourth inch thick, with a ring formed at one end, the body curved at right angles to the plane of the ring, and the tip longitudinally scratched with a fine file or sand-paper in order to engage the cotton when rotated in it. The total length of the finished instrument is six inches. The wire must, of course, be annealed near the sharp bends, by heating red hot and suddenly quenching. Iron or steel wire should never be used on account of its liability to rust and break in the nose. A very small quantity of absorbent cotton is twisted about the tip, care being taken to cover the rounded point, and the patient, holding the convex curve uppermost, passes the little finger into the ring and thereby securely grasps an instrument with which he can convey cocaine to all parts of the nose. The physician should perform the first application, touching the turbinated bones and meati on all their surfaces, paying especial attention to the floor of the nose and the anterior commissure. The space thus reached measures approximately four inches horizontally by two inches vertically in its greatest diameters.

During the operation the patient should be directed to notice the variations in sensation, some parts seeming to burn, itch, smart or cause sneezing or lachrymation. These spots should be mentally mapped out by the patient, who thus becomes possessed of a chart of the areas causing his distress. The physician then proceeds similarly with the other nostril and bids the patient to take hold of the instrument while *in situ*, manipulate it for himself, and to withdraw it from its greatest penetration, about four inches. This revelation of his own anatomy inspires confidence, and the physician's assurance that there are no structures in the nose which the patient's sensations will allow him to injure will soon lead to a most surprising ease of self-treatment, with an accuracy of touch and certainty of result impossible for an outsider to attain. With the assistance of atropine internally, weak solutions of cocaine will clear the nose, and therefore relieve other dependent symptoms, such as congestion and itching of the eyes, itching of the roof of the mouth, of the throat, ears and chest, and asthma.

The eyes will rarely need special attention, but in such rare cases they may be gently touched in both corners with a one or two-per-cent. solution of cocaine on the cotton-carrier, a fresh pledget of cotton being used. For the nose, the solution may vary from one-half to four per cent., according to the severity of the case and the time of day, the stronger solutions being required on rising and toward evening. It will rarely be necessary to employ a solution stronger than four per cent., a failure of which shows either a failure to reach the peccant area or that the cocaine is being washed away, and therefore indicates another application of cocaine or another dose of atropia.

Compared to this mode of application of cocaine other modes are clumsy, inefficient and wasteful. Atomization and instillation cannot reach the surfaces abnormally jammed together by the engorged bloodvessels, and without this indispensable condition cocaine is worse than useless, because more or less of it will be absorbed by the system, with injurious tendency. The delicate cotton-carrier can separate any surfaces forced together by engorgement, and be allowed to remain in contact with the sensitive spot, while the hands are free for any duty. The camel's hair brush, which is sometimes

used, has a clumsy quill preventing its soft and scattering hairs from reaching the tortuous passages, and it is furthermore dirty and difficult to clean, leading to a rapid deterioration of the cocaine solution. On the contrary, the cotton is readily pushed off the wire with the handkerchief or another piece of cotton, and the wire thus cleansed instantly. The quantity of cocaine used with the wire is very small, two or three grains per day being ample for a severe case. The quantity of atropine, likewise, seems absurdly small, a steady consumption of five granules daily for a month aggregating only three-quarters of a grain. It is very important that the granules of atropine be accurately made. This cannot be done on a small scale and it is therefore best to buy them of a large manufacturing house of good reputation.

The above treatment may be much assisted by general measures. Draughts or exposure to ordinary causes of cold in the head should be avoided, likewise sudden, great changes of light. Dust and respiratory irritants of all kinds are injurious. Sneezing can always be controlled by biting the upper lip, if other means fail, the pain of the bite being increased by a determined effort of will to the point necessary to obliterate the incitement to sneeze. Useless coughing must be strictly repressed. Rapid walking or running upstairs powerfully assist the action of cocaine for obvious reasons, and likewise mental occupation, reading, for instance, often rapidly comforting eyes apparently too photophobic for use. Diet should be ample in quantity, and non-inflammatory in quality. The hours of sleep should be prolonged.

These measures are the result of a large number of experiments, and as they have secured practical immunity to a severe case of twenty years' standing, they are recommended in confidence as a means readily available for every practitioner to use in relieving this opprobrium of his profession. Their applicability is believed to be general, no reason appearing why a patient should not be nearly as comfortable during his period of hay fever as at other times. Polypi or abnormal growths in the nose should, of course, be removed in any event. With his tiny armamentarium in his pocket the whilom victim has for three summers fearlessly trampled the rag-weed and breathed through his nose its poisonous pollen, sure of immediate relief from any paroxysm.

POSTURAL TREATMENT OF CONSTIPATION.*—A recent paper on constipation by an eminent surgeon of this city, and its discussion before the Boston Society for Medical Improvement,† emboldens me to speak of a source of trouble unnoticed, so far as I know, by formal writers. I allude to a faulty and unnatural posture at stool.

The act of defecation strongly resembles the expulsive stage of labor. The main propelling force in both cases is the contraction of the diaphragm and abdominal muscles, mere uterine action and intestinal peristalsis playing a subordinate rôle in both acts when physiologically performed.

The importance of posture and other aids in bringing out this natural action of the abdominal muscles in labor is tolerably well recognized by modern writers on midwifery. One often sees women in confinement quit the bed and take up a crouching attitude on the floor, instinctively feeling that they can bear down better in this position. The pulling and pushing movements with hands and feet so universally witnessed are directed to the same end.

Sixteen years ago I had myself the fortune to hit upon a simple and effective contrivance for this purpose which has proved of vast use in my hands. A description of it may be found in the Boston Medical and Surgical Journal of June 11, 1874. It consists simply of a twisted sheet with the ends tied together in the form of a ring or loop, in the lower part of which the feet are placed and pushed downwards, while the upper end is pulled upwards with the hands or wrists. It calls the whole set of waist muscles into powerful action, and secures where the way is clear, a prompt and natural delivery.‡

But to return to constipation. I feel sure I cannot be mistaken after twenty years' practice, and, I may say, almost daily study of the subject, in thinking that a faulty posture at stool and consequent inertia of the abdominal muscles have been among the commonest causes of the disease in the patients under my care. A gentleman, having finished his breakfast and lighted his cigar, retires, with the morning paper in his hand, to a cosy and well-heated apartment, takes a comfortable seat and between reading and smoking passively awaits the tardy operation of nature. He either takes no active part at all, or at most inflates his lungs a little and holds his breath, thereby depressing the diaphragm, but having no marked action on the other expulsive muscles—the straight and oblique abdominal, the *psoae* and *quadrati lumborum*. As a result the bowels are imperfectly emptied, a residual mass is left behind in the colon, which, accumulating day after day, must finally be evacuated by artificial means.

Put the same man in the woods, say the Adirondacks. At the call of nature he seeks the nearest thicket, and there assumes a strictly physiological attitude. He neither sits nor stands, he squats. Every muscle of the back and abdomen is brought into play, the bowel is rapidly and completely emptied; and, vacation ended, he returns to his home a new man.

Watch any of the lower animals, the dog, the cat, the pig, the ape at the menagerie, even the horse and cow when hard bound—always an approach to the same attitude. I suppose every one has noticed the same thing in young children.

I believe I need offer no apology for these observations.

We ought, then, to expect, what I have found to be the case, that the assumption of a correct posture at stool would prove a sufficient cure

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*Written April 20, 1888, and read before the Massachusetts Medical Society, June 13, 1888.

†See Boston Medical and Surgical Journal, April 12, 1888, pp. 376-378.

‡The description of what I call my "birth-sheet" was printed under the misleading title of "A Substitute for the Binder," a title prefixed by editorial oversight to a brief note without title. Doubtless I was to blame mpself for not giving the note a title descriptive of its contents, but the error was peculiarly unfortunate as tending to divert rather than attract attention to a contrivance which in my own experience has saved a deal of operative interference and a goodly number of human lives.

for what may be called passive constipation. The sitting posture should be interdicted, and a stooping one substituted. If the construction of the water-closet does not admit this it should be altered. The margins of the basin should be leaded, and wide enough to afford room for the feet on each side. Above this should be two covers, the lower one perforated, the upper not. One of the best arrangements, for men at any rate, would be to abolish the seat altogether, and have merely a stone or marble slab, with a hole in it, as is often seen in Europe, at or near the level of the floor.

For ladies the matter is less easily managed. I have often recommended the use of the chamber utensil instead of the ordinary seat. One lady of most distinguished family and position assured me that this was one of the most valuable suggestions she had ever received. I have found it equally beneficial in other cases.

I have now been using and recommending this posture treatment for twenty years. I hardly know any person of sense who ever properly tried it who did not find it of advantage. With proper diet and exercise it will surely cure the majority of cases with comparatively little aid from medicine. Still drugs and clysters are needful at times, and in certain cases must be regularly used: though I believe the greater part of those who require continuous dosing are persons too ignorant or too indifferent to try and cure themselves by natural and simple means. The abused motto, *natura duce*, too often made a mere cloak for professional ignorance, here finds a wise and wholesome application.*—EDWARD T. WILLIAMS, M. D., in the *Boston Medical and Surgical Journal*, Aug. 23, 1888.

ACTION OF JABORANDI AND PILOCARPINE.—In a very exhaustive report in the Deutsche Med. Zeit. are considered with great care and accuracy all the properties of both these remedies, on the basis of information derived from a number of clinical observations; the essential part—the deductions from the results—we quote here:

1. In physiological respects, the most constant property in the jaborandi is its salivating power, next to the diaphoretic, and last, the diuretic.

2. The first action did not fail to appear in any single case; it ensued rapidly, abundantly—with exceptional abundance, and with a duration of two hours and over.

3. The diaphoretic action failed in several experiments; is sparing, and frequently confined only to the face, throat and breast; very seldom over the entire surface of the skin, and with equal abundance and duration.

4. The diuresis on a large scale only ensued when the activity of the other functions of secretion were little or not at all affected by the remedy.

5. At times there appeared a disturbing (perturbative) action in the nervous system, which caused headache, swooning and occasionally symptoms of grave depression of functions, indispensable to the maintenance of life.

6. The remedy exercises but a slight influence on the digestive organs; diarrhœa resulted only once, and in two cases vomiting with gastralgia.

7. At the heart, an increase of frequency and decrease of systolic impulse ensued, in consequence of which the pulse was weak and frequent. In individual cases, the depressing effect on the heart muscle was so considerable that an incurable paralysis of the heart was feared.

8. Introduced directly into the eye the muriate of pilocarpine produced an immediate and marked contraction of the pupil, while the same remedy, as well as jaborandi, on internal application, produced constriction of the pupil to a lesser extent. Irritation of the eye on local use was not observable.

9. Neither in other affections, nor in the cases used for this purpose, did the remedy exhibit an ecbolic action; it therefore would only be indicated at the period of the expulsion of the fœtus.

10. The emmenagogue action, ascribed to jaborandi and pilocarpine by several physicians, seems to be based on an accidental coincidence, as menstruation is not influenced by them.

11. In therapeutic respects, the jaborandi and its alkaloid does not fully meet the expectations in disease, prompted by its physiological properties.

12 In rheumatic affections, in acute pharyngo-laryngeal catarrhs, the remedy acts very favorably, less so, however, in those in which moist cold figures as the only pathogenic cause.

13. In the dermatoses, resulting from disturbed equilibrium of skin activity, it is of undisputed worth, and produced rapid and radical cure in cases where other treatment had been fruitless.

14. The author believes that it is probably of advantage in those erysipelatous processes which develop with a certain uniformity at the same period of the year and always on the same spot.

15. In affections of disturbed assimilation (the author has only observed renal calculus and diabetes), it does not seem to be sufficiently successful, even though it is not injurious.

16. The remedy is worthless, indeed even injurious, in infectious diseases, as well on account of the prostration resulting from exces-

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*Since writing the foregoing paper, in fact since the printed programmes of this meeting were issued, my attention has been called to two articles on the same subject, one by Dr. A. W. Abbott, of Minneapolis, in the Northwestern Lancet of March 1, 1888, the other an editorial review of Dr. Abbott's paper in the New York Medical Record of May 12, 1888.

I have decided, notwithstanding, to read my own paper as I wrote it, without entering into any question of priority with Dr. Abbott. While he certainly has the honor of being the first in print, I can positively prove that my practice antedates his paper by an even score of years, and has been liberally recommended to patients and physicians ever since. It was my experience of the benefits of this practice which first suggested to my mind the conception of the "birth-sheet" previously described, which I commenced using in 1872, and published in June, 1874. On May 23, 1878, I explained in full detail my notions on the posture treatment of constipation before the Roxbury Medical Improvement Society, as can be clearly substantiated by the official records, and the recollection of members present at the meeting. The present paper was inspired by the one of Dr. R. M. Hodges previously alluded to, at a time when I was as yet totally ignorant of the already published article of Dr. Abbott. Yet there can be little doubt that the posture here advocated on scientific ground is habitually used by great numbers for convenience sake, and has been used by the majority of the race from the earliest period of its existence on earth.

sive secretion, as on account of the depressing effects on the vascular system.

17. The author regards it as absolutely harmful in croup and diphtheria: it does not seem capable of removing the pseudo-membrane, or of preventing the renewal of that otherwise removed.

18. In syphilis, it might act favorably in inveterate cases, in combination with mercury; unfavorably, however, under all circumstances in rabies.

19. The remedy yields certain results in parotid affections (parotiden)—the idiopathic as well as the metastic.

20. It is preferable to every other remedy in hydropic accumulations which stand in genetic relation to the kidneys. It is without effect in hydropsia of the liver and the heart.

21. In the exudative processes, especially of a serious nature, it acts rapidly and certainly, less so in the serous-fibrinous, and still less in the suppurative.

22. Respecting the nervous affections, it is a soverign remedy in singultus essentialis of rheumatic origin; on the other hand, without action in the paralysis from cold of the N. facialis; also in hemianæsthesia, the action seems to be advantageous, according to the slight experience of the author.

23. Jaborandi and pilocarpine may be prescribed for the support of women in cases of inefficient pains, and of abortion already in process.

THE SURGICAL TREATMENT OF INTUSSUSCEPTION.—The discussion upon the treatment of intestinal obstruction at the coming meeting in Washington of the Congress of American Physicians and Surgeons, will doubtless prove to be the auspicions event of the year, in the line of abdominal surgery. And we may certainly expect that it will put many of the, at present, mooted questions of diagnosis and surgical interference at rest, or at least upon a much more substantial and practical basis.

Mr. Arthur E. J. Barker has recently successfully and brilliantly operated upon a case of intussusception of the cæcum, ascending and transverse colon, which he reports in the Lancet of August 11th, together with some very interesting statistics of operative interference in such cases. His case was of unusual interest. A child, four years old, who had always had the very best of health, came under Mr. Barker's care, with indubitable symptoms of intussusception. He had copious bloody stools, accompanied with great straining and tenesmus, severe abdominal pain and peritonitis decubitus. A well-marked tumor could be made out in the left iliac fossa, but could not be defined by rectal examination. An ineffectual effort to reduce the invagination having failed, abdominal section was proceeded with seventeen hours after the onset of the symptoms. As soon as the median section had been made, a hand was carried into the abdomen and the tumor, not without considerable difficulty, was reduced by adopting a method of reduction recommended from a theoretical standpoint, some years ago, by Hutchinson. This consists in pushing the tumor upward from below and at the same time retracting the ensheathing bowel with one hand, while with the other gentle traction is made upon that portion of the intestine which enters its upper portion. In this case the reduction was mainly accomplished without bringing the mass into view. The involved bowel was œdematous and in places ecchymotic, but otherwise in good condition. The operation was completed in thirty-five minutes; no drainage was used, and the patient made a rapid and uninterrupted recovery.

Barker's statistics embrace preantiseptic as well as thoroughly antiseptically treated cases, and, consequently, whilst they present a somewhat grim appearance as regards success when contrasted with those of other departments of abdominal surgery, still, when we take into account all of the heretofore usual concomitants of this most desperate class of cases, we must be rather more surprised at the recovery recorded than at the mortality rate. He has been able to collect 63 cases of intussusception of all varieties which were treated by abdominal section—in most of them probably undertaken as a very last resort. Of this total, 38 were children, with a mortality of 87 per cent, and 25 were adults, with a death-rate of 68 per cent.

In all, 13 recovered and 50 died—a mortality of 74 per cent. Section was performed in 34 cases and the bowel released (including Barker's own case), with a mortality of 65 per cent. In 29 cases the intussusception was found irreducible. Of these 29 operations 5 must be classed as exploratory, as no treatment of the iavagination was attempted; in 14 the affected bowel was resected, and in the remaining 10 artificial ani were formed. But a single one of these 29 recovered—that of an adult whose intussusception was resected.

We think that these figures alone more than justify the author's modest conclusions that a larger array would probably strengtheu his belief that abdominal section "compares favorably with other methods of this very fatal condition."

Indeed, such a method of treatment should be practically always successful if we could make our diagnosis and operate during an early stage of the disease, before the patient had lost almost all chances which might have been in his favor, through exhaustion and septic absorption.

CALCIUM CHLORIDE IN GLANDULAR AFFECTIONS OF THE NECK.—Thomas J. Mays, M. D., says: In the progressiveness of medicine, many of our old and important remedial agents are without adequate reason pushed aside, and become superseded by something else which has been more recently placed in the therapeutic market. Such has undoubtedly been the history of calcium chloride—an agent held in the highest esteem by the earlier practitioners of medicine. It is hardly recognized by therapeutic authors of the present day. It is not mentioned by Wood (H. C.), Ringer, Bartholow, Stillé, Binz, Köhler, Schmiedeberg, and Nothnagel and Rossbach. Dr. George B. Wood ("Therapeutics and Pharmacology," vol. ii. p. 369) says that before the discovery of iodine, calcium chloride was among the most popular remedies in scrofula, and that the united testimony of many practitioners shows that it possesses useful powers in

these affections. It was likewise a favorite remedy with the late Dr. Warburton Begbie; and Dr. S. Coghill, of the Royal National Hospital for Consumption, at Ventnor, in a communication to the Practitioner (vol. xix. p. 247) states that he has "again and again seen chronically indurated and enlarged glands, which absolutely amounted to deformity, and which had resisted all previous treatment, yield, even in adults, to the administration of this salt. In children and young persons, when the sleep becomes restless; the breath fetid, the tongue foul and coated, the tonsils enlarged, I know of no remedy approaching it in value. The colliquative diarrhœa, which so often accompanies this condition, and above all that obstinate disentery which is seen with hypertrophy of the mesenteric glands, yield to the solution of the chloride of calcium like a charm."

I have used this agent for a number of years, both in private and public practice, and can fully indorse the strong views expressed by Dr. Coghill, especially in so far as scrofulous affections of the neck are concerned. Very often one meets with pale, rickety children, who have swollen cervical glands, poor appetite, coated tongue, constipation, and in whom there is a general indication of malassimilation. Such patients usually receive the routine treatment of cod-liver oil internally, and iodine, and perhaps cod-liver oil, externally. This succeeds sometimes, but oftener fails. Here the chloride of calcium acts admirably. It reduces the enlargement, promotes nutrition, and is generally more efficacious than anything I have ever prescribed. Its resolvent power is equally marked in the glandular swellings of adults, although here it requires a longer time, and its action is facilitated by the simultaneous application of iodine.

This agent must not be mistaken for the chloride of lime—the ordinary disinfecting powder—the composition of which is entirely different. By prescribing the granular calcium chloride this possible error will be avoided. The dose is from two to four grains for children, and from ten to twenty grains for adults. It can be given in milk or water, but the best vehicle for it is syrup of sarsaparilla.

Treatment of Pneumonia with Tartar Emetic.—On several occasions during the twelve months just past, we have laid before our readers articles on the treatment of pneumonia, which directed attention to the usefulness of methods which have gone out of fashion, so to speak. It is interesting, therefore, to note that in Germany, of late, the merits of tartar emetic have been discussed and warmly advocated. In the Deutsche med. Wochenschrift, for 1887, No. 47, there was a paper by Mosler which accorded an important rôle to this agent; and in the number for May 31, 1888, a similar position is taken, founded largely upon the experience of Brückner, who says that, in his opinion, there is no better remedy in the treatment of pneumonia in young and vigorous individuals, and that it may be regarded as almost a specific. He began its use at the suggestion of an intelligent practitioner, who declared that he had never had such good results from the use of any other remedy or measures. Brückner began the use of tartar emetic with the decided misgiving, but soon became convinced of its great value. He reports the case of a young man with acute croupous pneumonia, to whom he gave, at the outset, a tablespoonful of a solution of one part of tartar emetic in five hundred parts of water. The patient soon vomited, and a dose of the solution was then given every two hours. In twenty-four hours, the patient had vomited four times, but was decidedly better, and in five days his temperature was nearly normal, and his pneumonia in a state which left no room for anxiety. In his present practice, Brückner uses a solution of from one to three parts in two thousand parts of water, giving a tablespoonful every hour until vomiting or catharsis occurs, after which the dose is given every two hours. He has usually observed vomiting after the first or second dose. This is followed by from four to eight watery stools, sweating, and freer expectoration.

The beneficial results of this method in the treatment of seventy or eighty patients have been so striking that Brückner is quite enthusiastic over them. He has not found these results in every case so treated, but in the great majority of his cases he has seen great improvement to occur.

These results certainly warrant careful study in this country, where tartar emetic is not unappreciated, but where its administration in pneumonia is by no means common. There was a time when almost all cases of frank pneumonia were treated with bleeding and tartar emetic. But the time has passed away, and it is worth while to emphasize the claims advanced by Brückner, and to direct attention again to this valuable remedy.—*Med. and Surg. Reporter.*

Hypodermic Ergot.—The subcutaneous injection of ergotine has received recent consideration by Englemann (Centralblatt für Gynækologie, January 7, 1888) criticising a second article by Renner in which the latter objects to the hypodermic use of ergotine, in that it is painful and gives rise to inflammatory nodules. He attributes to poor preparations the irritation following. Secondly, that the preparations were too concentrated; and thirdly, that the abdominal parietes, instead of the glutei muscles, were the chosen site of the injections. Englemann thinks the site chosen is of no consequence—though he avoids the abdomen—so long as the solution is perfectly fresh—the reaction or degree of concentration being matters of indifference.

Englemann recommends a perfectly fresh solution, which the physician is advised to prepare for himself.

In the treatment of fibro-myomata, weak solutions are preferable—the action of the drug then being more gradual and continuous. All of which may be easily put in practice by physicians having ready access to a well stocked drug store.

But for the country practitioner—who dispenses his own medicines—a liquid preparation of ergot is the more eligible. I have for some years used the Normal Liquid Ergot of Parke, Davis & Co., hypodermically, in doses of thirty minims—the capacity of my syringe—selecting, in case of post-partum hemorrhage, the ab-

dominal parietes, directly over the uterus, as the site of injection, and I have yet to cause the first nodule. I use a clean needle and I inject no air—two very important points, often overlooked. I have, on two occasions, administered three injections in immediate succession into adjacent portions of the abdominal wall, with no ulterior effect save some soreness the following day, which soon disappeared without notice from me.

The advantages of the normal liquid ergot over a solution of ergotine are that it requires no dilution with distilled water nor filtering (both indispensable with ergotine); it is of constant strength, always ready and always in the medicine case of the accoucheur who desires the best preparation of a valuable "sheet anchor" in that most frightful of accidents to the puerperal state, post-partum hemorrhage. —G. V. Hale, in the *Texas Courier Record of Medicine*, July, 1888.

On the Application of Hydrastis Canadensis.—Dr. J. M. Fuchs, in Wiener Medicinische Blatter, No. 43, 1887, says: The efficacy of the fluid extract of hydrastis canadensis in simple menorrhagia, is a fact so frequently confirmed that it should not come forward with this short notice if I had not had occasion to observe the value of this remedy in a case of profuse menstruation, in which the latter was caused by a neoplasm—a myoma of the uterus, almost as large as a child's head. As, just recently, the efficacy of hydrastis in cases of uterine tumor has been reported from other quarters, I would prefer not to leave my observations unmentioned.

The case was that of a 35 year-old woman, who had given birth four times, had experienced entirely uncomplicated confinements, and had menstruated normally after the last birth—five years previously—as always before. It was only two years ago that the menstruation began to become irregular, took place every three weeks and even in shorter intervals, and lasted from ten to twelve days. When I saw the woman fourteen months ago, for the first time, she was very much reduced, highly anæmic, but had no knowledge of the tumor, which I at once diagnosed by the palpation of the abdomen, and which, doubtless, was connected with the anterior wall of the uterus. She stated that, aside from the hemorrhages, she had experienced no discomfort. The vaginal region presenting a normal appearance, an examination with sound was not permitted.

I then prescribed as a palliative, fluid extract hydrastis canadensis, which was taken without interruption in doses of twenty drops four times a day. The very first menstruation after beginning the treatment was retarded six days, and, after the lapse of a quarter of a year, the normal period was fully restored. I then discontinued the permanent medication, and gave the remedy only ten days before the anticipated period, until its lapse. Up to the present time—for more than a year—the menstruation has remained normal. I could not determine whether the tumor had become materially smaller, as I had to forego, as already stated, an exact intra-uterine investigation. The symptomatic success was, at all events, decided.

I would only add, that the remedy was not only well borne, but that it also, as has been emphatically stated repeatedly, exercised the most favorable influence on digestion.

Condurango in the Treatment of Cancer of the Stomach.—Prof. Dr. C. A. Ewald (Clinic of Diseases of Digestion; the Diseases of the Stomach, Berlin, 1888) says:

The interest aroused by Friedreich in 1874 was rapidly followed by an awakening which threatened to consign the remedy to oblivion.

A series of experiments, methodically executed, with little material, was recently performed and published by Immermann, and then by Riess on a larger scale from one point of view. Riess maintains that the remedy should be limited to carcinoma of the stomach, and declares in favor of specific action, in view of his experience, in 80 cases with condurango and 116 cases without condurango. "From an extensive series of experiments, the impartial observer would receive the decided impression that life, in part from the condurango treatment, had been considerably prolonged. Orszewcky and Erichsen claims to have observed, after application of the condurango bark, a stimulation of the development of cellular tissue, with simultaneous destructions of the cellulous elements of the carcinoma."

Ewald does not wish to dispute the favorable action of the condurango on the general welfare in cancer of the stomach. He says: "It is quite right, with reference to the important observations of Riess in this respect, that the remedy has been employed on an extended scale. The accompanying catarrh of the stomach is improved, and the same favorable effect secured also in common catarrhal mucous affections on the mucous membrane of the stomach, so that the condurango is an excellent stomachic in all cases in which a genuine catarrh of the mucous membrane is present, that is, the separation or secretion of a slimy-serous liquid, containing more or less pus.

The Poisonous Effects of Cigarette Smoking.—The experimental investigation by Dr. Dudley of the cause of the poisonous effects of cigarette-smoking, has led him to ascribe it mainly to carbonic oxide produced by the process of combustion. The difference in the effects of smoking a cigarette and a pipe or cigar he holds to be due entirely to a difference in the method of smoking. By the inhalation of the smoke the carbonic oxide is brought in position for absorption in the lungs and acts injuriously upon the blood by deoxidizing it. Were the smoke of a cigar or pipe inhaled in the same manner as that in cigarette-smoking it would be just as injurious. The experiments made upon mice, which were placed in a confined atmosphere thoroughly impregnated with cigarette-smoke, showed that the carbonic oxide quickly destroyed life, proving it to be a most noxious constituent of tobacco smoke.

Dr. Dudley rejects the explanation that the poisonous action of cigarette-smoking is due to the adulteration of the tobacco with drugs, such as opium, or to arsenic contained in the paper. Nicotianine is poisonous, but it is not peculiar to the cigarette. The deleterious

effects of the cigarette habit are, therefore, not due to anything peculiar in the composition of the cigarette, but to the practice of inhaling the smoke. It follows, therefore, that tobacco smoking is injurious in proportion as the smoke is inhaled. That the most poisonous constituent of tobacco-smoke is carbonic oxide seems indicated by Dr. Dudley's investigation, but further experimentation may demonstrate a different conclusion.

Hypodermic Injection of Antiseptic Substances in Pulmonary Phthisis.—A. Filleau and Leon Petit record the benefits they have obtained from subcutaneous injection of carbolic acid in pulmonary phthisis. They make use of solutions of two strengths, viz: a 1 and a 2-per cent. solution of absolute phenol in distilled water. If the phenol be pure, no accident need be feared, provided the injections be made slowly and the solution gently warmed. The dosage varies from 1 c. c., to 15 c. c., and even 25 c. c. per day. No accident is recorded, and evidence of intoxication, except in slight degree and slowly produced was obtained. The first indication of an overdose is frontal headache. When the manifestations of scrofula are present, the authors recommend the following:

℞ Iodine, 12 parts,
Potass. iodid., 3 parts,
Phenol absol., 10 parts.
Aq. destillat., 1000 parts.

Of this solution the dose is the same as of the other two. The authors further suggest formulæ similar to those of Dr. Meunier, whereby phenol may be injected in more bland solution. —*Bulletin de la Phthisie Pulmonaire*, No. 4, May. 1888, *Journal of Amer. Med. Associ.* Sept. 1, 1888.

The Local Treatment of Diseases of the Bladder.—Ultzmann considers topical treatment admissible only in chronic disorders of the bladder and the posterior portion of the urethra, and, as is not uncommon in gonorrhœa, these parts often require local treatment. For this purpose a thin cathether is passed into the bladder and then withdrawn until the flow of fluid ceases—the beak of the instrument thus lying at the neck of the bladder. If about ten ounces of an antiseptic fluid are now slowly injected, it will gradually flow over the diseased mucous membrane into the bladder, to be spontaneously evacuated by the patient after the removal of the catheter. In the treatment of the bladder itself, Ultzmann rejects the double current, because independently of the cases with shrinking of the bladder, the mucous membrane of the contracted organ is only partially washed. He prefers washing out the bladder by means of a soft catheter and a hand syringe, qualifying that the fluid must be completely evacuated. Ultzmann uses weak solutions, *e. g.*, one-sixteenth per cent. carbolic acid, one-half per cent. resorcin, one-tenth per cent. permanganate of potassium; in case of ammoniacal fermentation, he uses three drops of amyl hydride to a pint of water; in case of phosphaturia a one tenth per cent. salicylic solution.—*Deutsch. medicin. Wochenschr.*, Aug. 2.

A New Method of Destroying Tattoo Marks.—Dr. Variot has discovered a means of obliterating tattoo marks, a result hitherto reported to be difficult, and even impossible of achievement. He pours on the marked spot a concentrated solution of tannin, and works it into the skin by a series of pricks, just as in tattooing proper. A certain quantity of tannin is thus introduced beneath the skin. He then rubs the part with nitrate of silver, and allows the solution of the salt to remain *in situ* until the prick marks show out as black points. The caustic is then wiped off, and the result is the formation of a black stain of tannate of silver. Inflammation is set up, and in the course of a fortnight scabs form, on the disappearance of which no trace is left of the original design, the only *souvenir* being a reddish scar, which in time becomes less visible. Various other plans had been tried without success—scarification, the introduction of opaque powders and caustics into to skin, etc. The tannin in this operation acts as a mordant, and in no case did he have to deal with troublesome suppuration, although if the area be large it is well to do a piece at a time.—*Medical Press and Circular*, Aug. 22, 1888.

Advantages of Gelsemium Sempervirens.—G. M. Garland, M. D., in Bost. Med. and Surg. Jour., September 13th, thus sums up his study of this drug:

The advantages which gelsemium can legitimately claim are:

1. It has an agreeable taste, and is not repulsive to adult or child.
2. It does not irritate the stomach or bowels.
3. It produces no depressing after-effects from ordinary doses. The sleep is natural and the patient awakens refreshed.
4. In ordinary doses it causes no depression of the heart, and it can be used in all forms of organic diseases of the heart.
5. It does not create a habit. There is no depression of nerve centres following its use, and therefore no craving for more of it.
6. Its toxic symptoms are very characteristic and striking, and they appear early, so that plenty of warning is given.

Treatment of Acute Pleurisy by Milk Diet.—Food and medicine must be nothing but two to three litres of milk daily. If it be badly borne at first, bicarbonate of soda, lime-water, Vichy water, magnesia, etc., may be added. It should be taken in small quantities at a time. Constipation frequently results and is best combated by rhubarb. M. Clonard publishes seventeen cases thus treated, the average duration being fourteen and a half days. The diminution of the effusion only begins when the amount of the urine notably augments, and this effect does not arise until after two or three days treatment. This treatment avoids the necessity of repeated blisterings and the use of drastic purgatives.—*Journal de Médecine*, May, 1888, Art, 13,840.

The Medical Age.

Vol. VI. DETROIT, OCTOBER 10, 1888. No. 19.

Original Articles.

CHOREA.*

BY CHARLES H. MERZ, M. D., SANDUSKY, O.

In opening the discussion on chorea, I venture to offer your society, to-day, some observations which I have made during the past year. The subject has been more fully and ably treated by others, no doubt, but I trust that the results of my personal observations, even if limited, may be more acceptable than the elaborate statistics and works of others.

I shall not attempt to discuss all that pertains to the subject. It is the etiology and treatment that are of the most interest to us.

It is, perhaps, unnecessary for me to recount all the familiar details of the symptoms of chorea; you have, no doubt, observed them many times in your practice, but it may not be out of place to notice the various modes in which this disorder makes its onset. In some cases, the child, within a week after the onset of the disease, is unable to stand, to grasp any object, or even to remain lying in bed. In other cases the disease begins gradually; it may be in one shoulder, or one arm, and gradually, yet almost imperceptibly, advances until all the limbs are involved. In one case the choreic movements are perceptible only when the muscles are called into action, while in another the movements are irregular and violent from the inception of the disease. Those cases which set in mildly and later undergo a violent exacerbation, I believe to be more serious than the other forms.

These convulsive movements are apt to recur, though the first attack is generally the severest. Usually commencing in a gradual manner, progressing slowly, with little tendency to injury of the mental faculties, the disease, in spite of medical treatment, advances through a self-limited course.

Chorea may occur at any period of life, from infancy to old age, two cases having been reported in patients 82 and 86 years of age. The particular age at which it would seem most liable to occur is that of puberty. I have examined the record of 282 cases, and find that of these 217 occurred between the ages of six and fifteen years. It has been supposed that these movements were connected with the changes of puberty, but chorea, neuralgia and hysteria seem to be diseases to which the female sex are pre-eminently liable. Sex, then, would seem to exert a marked influence, for of 328 cases recorded by SINKLER, 232 were females, and 96 were males.

As to the etiology of chorea, we must acknowlege that there is much that is enigmatical. Cases occur which can be clearly accounted for and which have had similar cases preceding them, but there are others in which no definable cause can be ascertained. One cause which I think has received too little attention is overstudy in school. The close confinement of children for a number of hours in succession, and the annual examinations with their consequent mental strain, have undoubtedly given rise to many cases of chorea. These conditions are specially injurious to children whose nervous systems are as yet undeveloped, and whose strength, instead of being devoted to growth, is consumed in mastering subjects far above their comprehension. In them we find an ever active brain, an abnormal circulation, and the consequent headaches and nervous derangements. Rheumatism may be a cause of chorea, especially in those cases in which there has existed a rheumatic endocarditis. Many cases of mild chorea are unaccompanied by heart disease, while it is equally certain that the heart affection in chorea is often non-rheumatic. A careful study of the authorities on both sides of the question gives occasion to doubt the existence of any pathological law between rheumatism and chorea. Is it not possible and even probable, that the influence of rheumatism in producing chorea is no more than that of any other depressing agent upon the organism? The same conditions which predispose to rheumatism predispose to chorea, and I believe that careful study and observation will show that heart disease is sometimes a result and not a cause of chorea. It would not be surprising if the irregular and violent action of the muscular system should embrace those of the heart, and the damage would result from its attempts at regular and even action. It has been shown that the greater number of cases of chorea occur in the spring, though rain and dampness seem to have but little influence on the disease. Storms undoubtedly aggravate the choreic movements. I find this fact casually mentioned by SINKLER. In three

* A paper read before the Bay City Medical Society, September 26, 1888.

cases which have recently been under my observation, the influence was very marked. Indeed in one case I was entirely unable to account for the marked aggravation in the patient's movements, until upon close observation the advent of a storm was seen to increase their severity and the succeeding clear weather was followed by an amelioration.

What seems to me to be a very frequent and often unobserved cause of chorea is reflex irritation. A case recently under observation was that of a pale anæmic girl of ten years, who had suffered from chorea for several weeks. Every sort of medication and hygienic means failed to relieve her in the least. The motions had become so violent as to prevent the child from obtaining the necessary rest, and she was in a pitiable state of exhaustion. At last santonin was employed with the result that the child passed six lumbricoid worms, each one over seven inches in length. The expulsion of the worms was followed by a complete cessation of the movements and a complete restoration to health. In view of the nervous symptoms that are caused by these unwelcome guests, the restless sleep, the grating of the teeth and muscular twitching, are we wrong in inferring that the chorea was due directly and entirely to the presence of the worms in the intestinal tract?

Dr. Lewis Sayre has clearly shown the host of nervous derangements following an adherent prepuce. These adhesions produce constant and definite irritation which finally results in a peculiar characteristic condition of the nervous system. What this condition is, pathologists have as yet failed to show. The entire nervous system sympathizes with one nerve twig in traumatic tetanus. A foreign body, ever so small, lodged in the flesh may produce local or general convulsions. Chorea has resulted from the implication of a nerve in amputation scars, has followed the bruising of a finger, has followed in the wake of an attack of eczema. The mechanical irritation of an eczematous eruption may prove to be sufficient to cause serous reflex disturbance.

I offer these suggestions in the belief that they will account for many cases of chorea, the origin of which has been shrouded in mystery.

In addition to these, there exists another efficient cause of chorea, namely, hereditary influence.

Alcoholic and sexual excesses, upon the part of parents, must have an important influence on the production of chorea in the offspring. The waste of vital powers, no matter how produced, whether by poverty and want, whether by overwork in the struggle for wealth and fame, over-excitement and over-fatigue, or whether it be the consumption of nervous energy in long weary tasks or hazardous pursuits, the exhaustion leaves its traces in the offspring.

There is almost certain risk of bringing untold miseries upon the offspring of an ill-advised union. There is always to be feared the intensification of the neurotic type. A "pathological degeneration" of mind takes place through generations.

In a nervous system where the parts are imperfectly developed and badly adjusted, very slight strains disturb the equilibrium. The necessity for making a detailed and careful study of the family in cases of chorea of obscure origin becomes apparent. The treatment of chorea must therefore be largely hygienic. It must be borne in mind that chorea has a tendency to spontaneous recovery and that often the most severe cases after having been assiduously treated with all known remedies, suddenly disappear, to leave the patient as well as before.

I have in mind the case of a boy, æt. 11, in whom when first seen the choreic movements were confined to the right arm—they were, however, violent and irregular. As the prepuce was found to be adherent, he was circumcised. The movements remained uninfluenced. He was then given the ascending galvanic current and faradism, with no better results. Fowler's solution in 3-drop doses gradually increased to 10-drop doses three times a day, was given for a time. This was followed by zinc bromide in one-half grain doses gradually increased to 1½ grains three times a day. Under this treatment some little improvement was noted; the movements were less violent. Ether spray and co. tr. iodine were applied to the spine until it was blistered. Antipyrine was then given in 10-gr. doses three times a day. He was first seen on March 24, 1888. After three months of treatment he was discharged cured. On Aug. 23 I was called to see him again. The movements had commenced again and were so violent and constant as to prevent his obtaining any rest. The boy had absolutely no control over himself and voluntary movements were impossible. He would work himself out of the bed on to the floor. His head and hands had to be held while he was fed. Altogether he was in a pitiable condition. Treatment was at once commenced with hypodermatic injections of Fowler's solution, ten drops, daily. Bromides and chloral and occasionally hyoscyamine were employed to give him sleep. I finally resorted to the stomachic method of giving Fowler's solution and gradually increased the dose to 16 drops 3 times a day when it had to be discontinued. Baths and massage were commenced at the same time light gymnastic exercise was attempted. Improvement commenced at once and has continued up to date. Here is a case in which no cause can be assigned for the disease. There were no

heart murmurs, the boy had never had rheumatism and he came from quite healthy German parents. The movements constituted the disease. It seems to be generally admitted that arsenic is of more value than any other remedy. Its hypodermatic administration though possessing some advantages, has two serious drawbacks to its use. It is extremely painful and tends to produce abscesses. The Fowler's solution without the co. spirits of lavender should be used, and it must be diluted with an equal quantity of water or glycerin. This makes a bulky injection of an irritating fluid. I have been accustomed to giving the injections on the dorsal surface of the forearm but in spite of carefully filtered solutions and antiseptic precautions, I have had painful abscesses result. I cannot therefore recommend its hypodermatic administration though its effects given in this manner, may, like hypodermatics of strychnia, give better results.

The sulphate of zinc has been highly lauded. Indeed, it is claimed by some writers to have a specific value, but I have been disappointed in its results though having given it in 10-grain doses three times a day.

Baths and friction are of the greatest importance. It would seem that in many cases the violence of the movements in chorea decreases in proportion to the activity of the skin. Whatever proves to be of a tonic and sustaining character is of benefit. Free elimination of the waste products by the skin and bowels is to be carefully looked after. Fresh air, nutritious food and quiet surroundings are of equal importance. Excitemeut of any kind should be avoided. The slamming of a door, a word spoken quickly, often intensifies the movements greatly. In extreme cases rest in bed in a darkened room, will be found necessary. Hypophosphites and iron will be found of value in anæmic cases, but their administration should be carefully guarded, as anything that irritates the gastro-intestinal mucous membrane is undesirable.

The movements in chorea make the administration of strychnia undesirable, as it is impossible to tell when the physiological effects are produced.

Such then is the general treatment of chorea. So long as its pathology is so little understood, we shall be compelled to pursue such methods of treatment as experience has proven to be of benefit.

This paper would not be complete were I not to mention the therapeutic application of the magnet in chorea.

Attention has been called to this in a paper by DR. WM. A. HAMMOND, read before the New York Neurological Society in 1880.

DR. HAMMOND states that he has used the magnet in nine cases of chorea. In two of them the effects were remarkable, complete cures being produced in a few minutes. In seven others no results followed. It is probable that further observation will show that variations in the power of the magnets or the mode of application will be of advantage. If it be desired to try the effects of the magnet, the horse-shoe form should be selected. When several magnets are used, care should be taken that all the north poles and all the south poles correspond, or the power will be much lessened. In cases of chorea one magnet may be sus-suspended over the sternum and the other over the cervical vertebræ.

It is hardly reasonable to claim that the cure of chorea by the application of magnets is due to any positive or specific action on the part of the magnet—it would be rather likely that the beneficial influence, due wholly to the strong mental influence upon a susceptible patient. The fact is an interesting one, however, and is worthy of farther investigation.

CANCER OF BREAST.

CLINIC OF HAL C. WYMAN, M. D., M. S., PROF. PRINCIPLES OF SURGERY AND OPERATIVE SURGERY MICH. COLLEGE OF MEDICINE, DETROIT.

Gentlemen.—Mrs. B., the woman here, comes to the clinic on account of a lump in the left breast. She says she saw it first about two months ago; that it has pained her—sharp, shooting pains, and that she is afraid it is growing to be a cancer. You will notice that she is pale and not well nourished. She is 45 years of age, has dark hair and eyes, and weighs, perhaps, 125 pounds. Her family history does not reveal any relative who has suffered from cancer or tumor, nor is her race consumptive. She says she has never worked excessively, has had no children, and has been a widow three years. Her husband was sick for three years, during which time she nursed him. The doctors said he died of dry bronchitis.

We will now examine the breast. You will first notice the nipple; you can see that it is pinched and retracted—a sure sign of malignant disease. The connective tissue of the milk ducts are involved in the disease. If we feel carefully we discover a hard mass in the substance of the breast—a tumor in the gland. This is what has given her pain and made her apprehensive for some time. The gravity of this case will largely depend upon the state of the neighboring lymphatics and glands. If we find them elongated, infiltrated by disease, the situation will be more serious for the patient. We would in that case open the axilla and remove the gland together with all the lymphatic vessels we could reach with the knife. No operation would do any good which did less than this. Now we carefully examine the pa-

tient's axillary region and subclavian triangle with our fingers. We are presumed to have so trained our fingers in the sense of touch, *tactus eruditus*, that we can tell whether any of the organs situate in the region under examination are in an abnormal condition. Sometimes the axillary glands and lymphatics will be painful and swollen because of sores or wounds of the fingers. Such cases must not be mistaken for the disease which is propagated in the mammary gland and extended to the lymphatic system. Our patient's axilla is normal. The disease of the breast is in her case probably local. We will remove it. Now, while she is going under the anæsthetic, I want to speak of a case something like this which I was preparing to operate upon. I had examined the breast several times, and had satisfied myself that the tumor ought to be removed, but after my patient had gone under the influence of the anæsthetic and I was about to make an elliptical incision around her nipple, I was astonished to find that my tumor had vanished—phantom like. That was a case of phantom tumor of the breast, while the patient was under the influence of the anæsthetic it could not be felt, but when she had her senses and her attention was drawn to her breast a distinct, freely moveable tumor could be felt in the glandular substance of her breast. Our patient being now ready, I proceed to remove this tumor and shall be careful to remove every part of the mammary gland with it. I make an elliptical incision including the nipple and areola, and extending across the breast. It gives me plenty of room in which to dissect out the tumor and breast. You notice there is free hemorrhage; these spurting arteries we catch and control with several pairs of artery forceps, and after our dissection is completed we will tie any of them that are still inclined to bleed. Observe how the pectoral muscles have been denuded in getting the tumor thoroughly out. You can see that every visible and palpable portion of the disease has been removed. We deluge the wound with hot water, strength 1 : 5000 of corrosive sublimate, to control the oozing of blood from veins too small to twist or tie, and to prevent our operative proceedure from infecting the wound with germs which might cause putrefaction and suppuration. We next introduce sutures of sterilized linen, half inch apart and close the wound, leaving a drainage tube projecting from the most depending angle. We will remove it in a few days. We now dress the wound by laying a strip of sublimate gauze over it and covering that with two-inch thick layers of ordinary cotton which has just been sterilized by roasting it to a dark brown color in the hospital oven. This cotton we hold in position by a bandage around the chest and over the shoulder. Our patient having returned to consciousness, the operation and dressing are completed. We will visit her daily in the ward and not disturb that dressing before a week or ten days unless we find her with pain, quick pulse and rise of temperature. In that event we will remove it and give any pent up fluid in the wounds a chance to escape.

I want to say a few words about tumors of the breast: (*a*) If left to nature, they kill almost every woman who has one. (*b*) If operated upon early by either knife or caustic and thoroughly removed, about 12 per cent. will be cured. (*c*) If lymphatics of axilla are affected and removal includes them, five per cent. of all the cases can be expected to get well. (*d*) The danger of the operation of thorough removal by either knife or caustic may be estimated at about one death in thirty operations. (*e*) Every tumor in the mammary gland which cannot be traced to purely transient inflammatory origin ought to be promptly removed. (*f*) It has been my rule during the sixteen years that I have been in practice to advise removal of every diseased breast that consulted me, excepting those cases in which the tumor was due to imperfect nursing, and was likely to terminate in resolution or abscess.

I may have removed many breasts that would never have developed into cancer, but, if so, every one of those women are still living. I have never thought myself competent to cope with a doubt in these cases—deferring operation until diagnosis became clearer or confirmed.

The almost certain death of the patient, no matter what the treatment, when the case is unmistakably cancer, has made me prefer to to take the tumor out first and do my speculating and diagnosing afterwards. My good statistics have brought me many patients with tumor of the breasts who otherwise would have consulted no one until every doubt in regard to their cases had vanished.

THE NATURE AND TREATMENT OF DIPHTHERIA.

Dr. Abraham Jacobi, of New York, read a paper on this subject before the Section on Diseases of Children of the late meeting of the British Medical Association, held at Glasgow. He denied the existence, so far at least as yet discovered, of a specific diphtheritic microbe, and held that the poison was more of the nature of a ptomaine. Like the poison of erysipelas this poison avoids a healthy surface. The disease is contagious, and, in his opinion, is never of spontaneous origin.

After discussing several of the moot questions in connection with diphtheria and its identity with other affections, Dr. Jacobi continued as follows:

Let me now turn your attention to follicular amygdalitis ("tonsillitis") as "another form of sore throat." The tonsil is a conglomerate of follicles or lymph bodies of the very simplest form. They are connected with each other by a network of cellular tissue, in the meshes of which colorless and nucleated lymph cells and fine circular lymph vessels are contained. The surface of the tonsil is covered with a mucous membrane. Between it and the tonsil there is still a layer of parallel fibres of connective tissue. The mucous membrane has its own muciparous glands, and is covered with several layers of pavement epithelium. These epithelia, however, do not adjoin each other very closely; for, according to Stoehr, there are interstices between them which permit round cells to escape. The surface of the mucous membrane is not smooth and level; it has depressions which LUSCHKA called lucunæ, VIRCHOW crypts. It is never the entire mass of a tonsil which is affected by a disease. Even malignant maladies start from single localities or tissues. There may be an affection of the superficial mucous membrane or of its epithelial covering, the subjacent connective tissue, or the dense connective tissue between the follicles, or the follicles themselves with their scanty lymph ducts, and finally the cellular tissue in which the whole tonsil is imbedded.

The surface membrane of the tonsils, with its lacunæ (Luschka) or crypts (Virchow), may be the seat of catarrhal, inflammatory, and diphtheritic processes. There may take place accumulations of mucus, pus, pus and fibrin, and diphtheritic membrane, and mixtures of several of them. In the course of time the mucous membrane itself will undergo changes. Occasionally its muciparous glands exhibit an inflammatory exudation or effusion, also ulceration of vesicles, particularly during a universal attack of follicular stomatitis of infants. Smaller or larger abscesses within the deeper tissue, which perforate the surface, destroy part of the tissue and give rise to persistent sinuses, which are found empty or filled with mucus or pus, or pus with fibrin, or cretaceous material consisting mostly of leptothrix, and permit of the introduction of a probe to the depth of from one to two centimetres. The superficial indentations and depressions also may become deeper and more irregular, in consequence of morbid processes of the surface or the deeper tissues. In these cases it is not always easy to tell the difference between a transformed crypt or an incomplete fistula resulting from an abscess. Anatomically, there is a difference. But clinically, and practically, it is useless to know that the former is covered with epithelium, and the latter has none. Diphtheria may occur on either.

The deepened crypts and the fistulous remnants of former abscesses may be the seats of different processes, as stated. No matter whether their contents consist of hardened muco-pus, or pus with cretaceous material, the appearance is alike in most cases. If the little dots formed in this way, sometimes two, sometimes a dozen at a time, remain distinct from each other, we speak of tonsillar follicles; if there be some hyperæmia and swelling, we proclaim it a follicular tonsillitis. If the dots will prove confluent, and coalesce with a contiguous membrane, we shall, or ought to, call this diphtheria. Such cases may run a mild course as far as fever and constitutional symptoms are concerned. In some there is fever. It has been claimed that diphtheria and "tonsillitis" differ in this, for the purposes of diagnosis, that the tonsillitis has more fever than diphtheria. But which is the regulation temperature of diphtheria? I cannot tell, nor can they. The fever depends on quite different things. A process which begins and runs its main course in the depth of the tonsil, in a fistulous sac with a narrrow opening, is attended with high fever, no matter whether it be simple, or phlegmonous, or infectious; in the same way that a deep-seated abscess, or that an extensive galvano-cauterization of the interior, through a narrow inlet, produce fever.

Thus the fever is certainly no diagnostic aid. What is? Is there a positive one? The diagnosis of diphtheria is easy enough when the six or ten points have melted together to-day into a membrane. Was it diphtheria yesterday? If not, why not? What is the regulation size of a diphtheritic membrane, a square foot, or the head of a pin? Either, certainly. On a conjunctiva, or cornea, we should be satisfied with the latter. This much is certain, that those cases which are evidently diphtheritic to-day were so when the process commenced yesterday, no matter whether in a crypt, or in an old sinus, or in the intra-epithelial interstices of Stoehr. The latter, which are normal occurrences, are particularly adapted to admit the virus in small deposits.

This conviction that many of the cases of so-called follicular "tonsillitis" are of diphtheritic origin and nature is an old one with me. I give it expression in a paper On Diphtheria and Diphtheritic Affections, which I published in the American Medical Times, of 1860, and claimed that the "herpetic angina" of the French was in many cases nothing but diphtheria.

Every new attack of inflammation of any kind, or suppuration, results in the destruction of the normal tissue of the tonsil, and the production of more connective tissue. Thus the small army of lymph-vessels and the blood-vessels are compressed and rendered atrophic, and on the surface the mucous membrane, with its epithelium, is replaced by cicatricial tissue. When the tonsil is thus changed, an invasion

of diphtheria can but rarely form a large membrane. Thus it explains itself that large membranes are but rarely found amongst adults. Punctated diphtheria is, therefore, found amongst them, as it is in adolescents and such older children as have suffered from throat diseases a great many times. Enlarged tonsils and chronic pharyngitis are amongst the causes of pharyngeal diphtheria in the very young, and their frequent relapses. After, however, a number of attacks have been overcome, the same enlargement of tonsils, and chronic pharyngitis, with their final changes in the shape of hyperplasia of anæmic connective tissue, results in the suppression of the former acute and well-marked attacks, and the substitution of punctured membranes in their stead. But whether membrane or not, the contagiousness of the disease is the very same. A mild variety begets that which is mild or severe, as the severe form may produce its like or a mild variety. This mild variety is that from which adults are apt to suffer. Permit me to repeat these verbal statements from a former paper on a similar subject. They made me proclaim the warning that there is as much diphtheria out of doors as in doors, as much out of bed as in bed. With this variety the adult is in the street, in business, in the schoolroom, in the railroad car, in the kitchen and nursery. With this variety parents, while complaining of slight throat trouble which they do not mind, kiss their children. It appears there is to be no escape from this mild murderous variety. But wherever it is suspected it ought to be looked after; where it is seen it must be isolated and treated, less, perhaps, for the sake of those who are sick, than of those who are in serious danger of being infected. Most of you have known families in which the different forms of membranous deposits and diphtheritic general affection occurred at the same time. One child has membranous croup, another dies of diphtheria and sepsis, another has pharyngeal diphtheria, another the "follicular" punctated and isolated deposits on the tonsils, and the adults complain of pain in deglutition, and general *malaise*. Is there no way to make the diagnosis between catarrhal, or cretaceous, or leptothrix, or diphtheritic forms of the follicular affection? Indeed, nothing is of more practical importance. The degree of congestion yields no positive information as to catarrh, phlegmon, or infection. When the congestion is unilateral, it is apt to be due to either trauma or local infection, catarrhal congestion being bilateral. The follicular dot, when benign, is easily brushed off or lifted out, or squeezed out, and rapidly replaced. The replacing of a diphtheritic deposit would take hours, at least. A catarrhal secretion is ever apt to change its place by the patient assuming another position. In any non-diphtheritic form a probe can be introduced into the dilated crypt or the sinus, simulating a pseudo-membrane; in the diphtheritic it is impossible, because it seldom leads into a sinus. Every attempt at removal of a diphtheritic deposit is rather difficult, and results in pain and a little bleeding. But the diagnosis is not always made. In that case the treatment ought to be that of diphtheria. The inconvenience of isolation is of less annoyance to the patient than the omission of it is a great danger to others.

Is the presence or absence of fever of any value in the differential diagnosis of the different forms of amygdalitis—catarrhal, fibrinous, suppurative, and diphtheritic? The third form, the suppurative, shows this difference from the others, that it is not superficial, but in the interior of the tissue. The other forms are all more or less confined to the surface of the tonsil. They need not be so, and generally are not attended with fever; for this would be due to one of two causes, either copious lymph communication with the system or nerve irritation by pressure. The former does not exist in the tonsil to any great extent in the young, and hardly at all in the old. The latter cannot take place on the surface, but in the interior only. I will give you an example. When you thermo-cauterize or galvano-cauterize the tonsil, you will make the following observation: Touch the surface, and there is no fever afterwards; run your needle deep into the tissue with a narrow entrance, and you will be liable to produce fever like that of a deep-seated abscess; but if you introduce the needle in the same manner and do not withdraw it through the same opening, but run it through the whole organ sideways, so as to form a large superficial scurf, you have no subsequent fever. While this experience is of great practical importance, it illustrates what is going on in the usual morbid processes of that region.

In the same manner every morbid process, catarrhal or diphtheritic, which is limited to the surface of the tonsil, need not be feverish at all. The follicular affection is not feverish as long as the opening of the crypt is larger than the interior, and no bottle-shaped cyst formed. Surface diphtheria gives rise to no fever as long as there are no, or but few, lymph-ducts to carry the infection to the system. This is the case pre-eminently in the tonsils and in the vocal cords. Both are covered with pavement epithelium; both have but little lymph communication. Thus what I have said of uncomplicated diphtheritic amygdalitis is also valid for diphtheria of the vocal cords. A membranous croup—diphtheritic laryngitis, or laryngeal diphtheria—without diphtheria of other parts or complication with some other feverish disease, has no fever. Croup symptoms, with high fever, uncomplicated and otherwise, do not belong to

the membraneous form. It is catarrhal laryngitis that begins with fever, for here is a general affection, or rather infection. Even in cases of an existing punctated amygdalitis, when symptoms of croup make their appearance, the continuance of a low temperature characterizes the affection as pseudo-membranous. If there be an access of fever, either the croup is catarrhal and permits of procrastination, and is quite amenable to medicinal treatment, or there is another feverish or inflammatory complication. I have often made the correct diagnosis of doubtful cases in this way; and the more I have seen since I first pronounced this alleged heresy many years ago, the more do I become convinced of the truth of that statement.

The treatment must be mainly preventive. Every case of diphtheria must be isolated, during the winter, on the upper floor of the house, windows opened as much as possible, furniture of any kind reduced to the least possible quantity, the room changed every few days. The sick in crowded houses and quarters ought to go to a hospital; these hospitals must be small; or the well removed to a healthy place; in large cities to temporary homes provided for the purpose. The sick must be reported to the health boards. The well children of a family with diphtheria must not go to school or church; schools be closed when an epidemic makes its appearance; teachers instructed in the examination of throats. The condition of the house is to be examined into and improved; attendants, servants, nurses and cooks, seamstresses and laundresses, teachers, shop-keepers, restaurateurs, barbers, hair-dressers, with their mild diphtheritic attacks and strong pecuniary interests, are frequent sources of infection. In times of common danger public places, theatres, ball-rooms, dining-halls, public vehicles, hackney coaches, and railroad cars, must be superintended by the authorities. There must be no clashing permitted between the public good and the individual money bag. Clothing, bedding, room and house must be thoroughly disinfected; articles used in the sick-room burned or soaked in a disinfecting fluid in the room, not carried over the house in a dry state; the rooms thoroughly disinfected after a case terminated favorably or unfavorable; the corpse disinfected, the funeral private, nothing removed from the house unless disinfected, no pieces of carpets thrown away to be picked up by beggars, no mattresses benevolently donated to the unsuspecting poor.

Individual prevention amounts to a great deal. Diphtheria not attacking healthy integuments, these have to be kept so. Mouth-breathers are always in danger of diphtheria; therefore, catarrh of the mouth, nose, and pharynx must be treated in time, large tonsils either resected or trimmed with the actual cautery, a very simple procedure, the septum narium corrected, if actually required, by the urgent necessity of the case, beside the eager necessities of the local specialist, glandular swellings round the neck corrected.

To enumerate the medicines recommended in diphtheria would be to read off the Pharmacopœia, part of the Chinese and Paullinus' stinkpharmacy included. There are no specifics, no panaceas. Chlorate of potassium is a good adjuvant, because it is a good remedy in oral and pharyngeal catarrh. Give it often and in small doses, if at all, and remember that it may be a poison. When I sent out my warning in 1860 it was not heeded. Since my papers of 1876, in Gerhardt's Kinderkrankheiten, and 1879 in the New York Medical Record, the reports of deaths from potassic chlorate have been quite numerous. Most of the remedies recommended were for the purpose of either solving membranes, or of disinfection, not to speak at all of the burying of a throat membrane under varnish. Amongst the solvents are alkalies, lactic acid, steam, beneficent in many cases unless it softens and soaks too much, papayotin, and trypsin, active whenever it can be applied, and the cruel pilocarpin. The disinfectants comprehend all the phenols, alcohols, a number of metals, to a certain extent also the balsams. It is superfluous to tell the names. The story of the dread enemy and its frequent invulnerability is best told by recalling hydrogen hyperoxide, salicylic, carbolic, boracic, and hydrofluoric acids, creasote, corrosive sublimate, turpentine and eucalyptus, benzoate of sodium, and chinolin.

There are three great indications to be fulfilled in the treatment of every individual case: cleansing and disinfection of the surface from which systemic poisoning may take place by absorption, fitting the patient to fight his way out to a favorable end, and meeting local emergencies.

During the discussion I may have the time to give the rules for attending the nose, the throat, the conjunctiva, consecutive paralysis, etc. Whatever is done must be done very diligently, indefatigably, but without violence to the sore surface and the patient. No child will stand up against the alliance of diphtheria and doctor, or diphtheria and nurse. Besides, whatever you do, look for the protection of the healthy epithelium.

Amongst the medicines I have learned to respect the chloride of iron. The tincture may be given a drachm daily to a baby a year old, much more to older ones, in very frequent and small doses. It is mostly well to water. It is self understood that every bad symptom or occurrence must be attended to. High temperature, convulsions, albuminuria, have their own indications.

These fragments may suffice here. I must not trespass upon your time indefinitely. Still, I should wish to make the direction treatment has to take in general clear by stating my method of dealing with heart-failure, and make a remark on bichloride of mercury.

Besides sepsis, the great dangers in diphtheria are heart-failure and strangulation. The latter I shall not speak of in this connection, as it forms one of the special subjects which is to be considered by you; both tracheotomy and intubation have been proposed as topics of discussion. Heart-failure is usually developed gradually. It is foreshadowed by an increasing frequency and weakness of both heart-beats and pulse, by an occasional intermission, by unequal frequency of the beats in a given period (say of ten seconds), or by the eqalization of the interval between systole and diastole, and diastole and systole. This latter condition, which is normal in the embryo and fœtus, is always an ominous symptom.

Heart-failure is due, beside the influences common to every disease and every fever, to tissue changes in the myocordium, in the nerves, or both. These changes may be due to the ill-nutrition of the tissues resulting from every septic condition of the blood, or specific alterations due to the diphtheritic process. Failure may either come on after having given warning, or it may be on you without any. Thus, there is no case of diphtheria—beyond, perhaps, those of the mild tonsillar form—but ought to make us anxious and afraid. Indeed, there is no safety and no positive prognosis until your patient is quite recovered, and even advanced beyond the period in which the paralysis may develope.

Whatever enfeebles must be avoided; absolute rest must be enjoined. The patients must be in bed, without excitement of any kind; take their medicine—which ought to be as palatable as possible—and their liquid food, and evacuate their bowels, in a recumbent or semi-recumbent position; crying and worrying must be prevented; the room kept airy and rather dark, so as to encourage sleep if the patient is restless—and restless they are, unless they be under the influence of sepsis, and thereby subject to fatal drowsiness and sopor. In no disease, except, perhaps, in pneumonia, have I seen more fatal results from exertion on the part of the sick, or from anything more than a sudden change of posture. Unless absolute rest be enforced, neither physician nor nurse have done their duty. The latter must avoid all the dangers attending the administration of medicines, injections, sprays, and washes. Preparations for the same must be made out of sight, every application made quickly and gently. On no condition must a patient be taken out of bed for that purpose. I know of children dying between the knees of nurses who called themselves trained and had a diploma.

Pharmaceutical preparations, such as digitalis, strophanthus, sparteine, caffein, besides camphor, alcohol, and musk, must not be postponed until feebleness and collapse have set in. They are at least possible, even probable; and this is certain, that a cardiac stimulant will do no harm. It is advisable to use them at an early date, particularly in those cases in which antipyrine or antifebrine are given. Besides, it is not enough that the patient should merely escape death; they ought to get up, *cito, tuto, et jucunde*, with little loss and speedy recuperation; a few grains of digitalis or their equivalent—preferably a good fluid extract—may or must be given in a pleasant and digestible form daily. When a speedy effect is required, one or two doses of two or four grains each are not too large, and must be followed up by smaller ones. When it is justly feared lest the effect of digitalis be too slow, I give, with or without it, sulphate of sparteine. An infant a year old will take one-tenth of a grain four times a day as a matter of precaution, and every hour or two hours in an emergency.

Of the same importance are alcoholic stimulants. The advice to wait for positive symptoms of heart-failure and collapse before employing the life-saving apparatus is bad. There are cases which get well without treatment, but we do not know beforehand which they will be. No alleged mild case is safe until it has recovered. When heart-failure has once set in—and often it will occur in apparently mild cases—our efforts are too often in vain. Thus alcoholic stimulants ought to be given early and often, and in large quantities, thoroughly diluted. There is no such thing as danger from them or intoxication in septic diseases. A few ounces daily will not suffice; but I have often seen ten ounces daily of brandy or whisky save children who had been doing badly with three or four.

Caffein, or, in its stead, coffee, is an excellent cardiac tonic, except in those cases in which the brain is suffering from an active congestion. For subcutaneous injections the salicylate (or benzoate) of caffein and sodium, which readily dissolve in two parts of water, is invaluable for emergencies, in occasional doses of from one to five grains in from two to ten minims of water. From five to twenty grains of camphor may be given daily, as camphor water or in a mucilaginous emulsion which is easily taken. It does not so disturb the stomach as carbonate of ammonia is apt to do. For rapid effect it may be administered hypodermically, in five parts of almond oil, which is milder and more convenient at the beginning of failure, but mainly in cases with little increase of temperature. Its effect is

more than momentarily stimulating. But the very best internal stimulant in very urgent cases is Siberian musk. I prefer to give it from a bottle, in which it is simply shaken up with a thin mucilage. In urgent cases it ought to be given in sufficient doses and short intervals. When ten or fifteen grains administered to a child one or two years old within three or four hours will not restore the heart's action to a more satisfactory standard, the prognosis is very bad.

Besides exhaustion on the height of the disease, we have paralysis during convalescence, or intense anæmia long after apparent recovery. This anæmia may be general, or is local, and then mostly cerebral. Both have indications of their own.

In urging upon you these remedial measures in the dangers of diphtheria, I beg of you not to take me for a meddler and interferer. Like yourself, I see many a case of sickness, and treat many without medicines. But there must be a reason for both non-medication and medication: and there must be medication when there is an indication for it. When there is, there is also an indication for a sufficient dose. I blieve in Nature, and in spontaneous cures, but I know also that Nature destroys with the same equanimity and indifference with which it allows the getting well. I believe in the action of medicines, and the responsibility of the physician; I know that when a political Nihilist commits a single murder the newspapers of the world talk loudly of it. When a therapeutical Nihilist commits a hundred homicides a quiet certificate and the silent sod cover the sins of omission.

Perhaps the most useful internal remedy is mercury. Empiricism has often praised calomel in small and large doses. My acquaintance with mercury in this connection is not at all new. More than four years ago I published a number of cases which got well under its use; at the same time that DR. THALLON, of Brooklyn, published an article on the same subject. Since I have employed it, (I prefer the bichloride,) my conviction of the utter uselessness of internal medication in laryngeal diphtheria, so-called pseudo-membranous croup, is thoroughly shaken. Until about ten years ago I felt certain of a mortality of 90 or 95 per cent. of all the cases not operated upon. These figures were not taken from small numbers, for I compared those I found with my own. The latter are not a few either; for within the last thirty years I have tracheotomised nearly 600 times, have assisted at as many more operations, and have seen at least 1,000 cases of laryngeal diphtheria which were not operated upon at all. During the last six years I have seen no less than 200 cases, perhaps many more. Amongst them recoveries have not been rare at all, at all ages, from four months upward. The uniform internal medication consisted in the administration of a dose of the bichloride every hour. The smallest daily dose ever given by me in the beginning was 15 milligrammes, ¼ of a grain, to a baby of four months; this was continued a few days; and the dose then somewhat diminished. Half a grain daily may be given to children of from three to five years, from four or eight days or longer. The doses vary from one-sixtieth to one-thirtieth. They require a dilution of 1 in 6,000 to 10,000 of water or milk. There is no stomatitis, and gastric or intestinal irritation is very rare. It occurred in a few cases, but then it was found that the dilution had not been sufficient, 1 in 2,000 or 3,000 only. If ever it exist, small doses of opium will remedy it.

The benefit to be derived from the remedy depends greatly upon the time of its administration. Tracheotomy or intubation is required as a rule, after days only, and can often be avoided if mercury be given in time. If the operation become necessary after all, the treatment must be continued diligently. Never have I seen so many cases of tracheotomy getting well, since 1863, as when the bichloride was being used constantly in 1882, and the five subsequent years. Nor am I alone with these favorable results. There are dozens of practitioners in New York city with whose methods and results I am well acquainted, some of whom are connected with me, in some capacity or other, who confirm the above statements.

My experience with the bichloride is mainly gathered in cases of laryngeal and bronchial diphtheria, so-called pseudo membranous croup and fibrinous bronchitis; it is there where it has been particularly effective. Still, but few of these were quite localized affections. Our cases of diphtheritic laryngitis are mostly descending, and complicated with either diphtheritic pharyngitis, rhinitis, or both. Not a few, mainly of the latter kind, exhibit constitutional symptoms of sepsis; many such have also got well.

It so happened that cases of naso-pharyngeal diphtheria with septic symptoms have not often been treated by me with the bichloride. What little I have seen, partly in my usual consultation practice, partly in the results of the Willard Parker Hospital for diphtheria and scarlatina, where DR. PRIEST has acted upon my suggestion, has confirmed the teachings of LYNN and PEPPER, who rely on the bichloride of mercury, as their sheet anchor in the very worst form. The results are enviable when compared with others, nor is the reason for its efficacy very obscure. If an antiseptic which certainly enters the circulation without previous decomposition is required, and which at the same time is safe and efficient, it is the bichloride; if the virus be bacteria, so much the better. It is not necessary to introduce in-

to the circulation, for the purpose of counteracting the effects of bacteria, solutions sufficiently strong to destroy them; for such doses would destroy blood cells first. According to T. MITCHELL PRUDDEN, a solution of one-sixteenth of one per cent. of carbolic acid prevents the emigration of white blood-corpuscles under circumstances otherwise favorable to inflammation, and KOCH found that though bacteria are not easily killed, their growth is stopped by a solution of one part of carbolic acid in 850, and their activity by one in 1,200. These effects are all that is required for practical purposes. If the growth and activity of the bacteria be stopped, the cells will see to it that the republic suffer no harm. Now the bichloride of mercury is the most powerful of all the antiseptics. A child of from 35 to 40 pounds carries about two pounds of blood, equal to about 15,000 grains. One-sixth of a grain of bichloride floating in the circulation ought to be able to stop both the activity and the growth of parasites, if parasites there be.

DR. LOVE, of the Weekly Medical Review, is a philosopher. Mark the following, recently let flow from the point of his pen, for the special benefit of a caustic western contemporary: "To him who daily casts out upon the waters of life the bread of scornful and cutting words, there can return nothing but a harvest of barren regrets. Had I a voice, a persuasive and pervasive voice, I would remind him that unkind words can never die. They will come back to haunt one when least expected. Look for the good, the true and the beautiful. Be not ever on the look-out for flaws, blemishes and the disagreeable, for if you are, you will surely find them. One is pretty apt, if earnest and energetic, to get that which he goes after in this world. While taking in life's daily landscape, linger upon the pleasant spots and hurry past the imperfect. The disposition to cut to pieces and dissect grows upon one unless it be fought. Of all sad things of tongue or pen, the saddest is the man who is ever on the alert for nuggets of naughtiness presented by others."

The University Medical Magazine, No. 1, Vol. I, is before us. It is an 8vo., volume of 68 pages and is filled with contributions from members of the Faculty and graduates of the University of Pennsylvania. It, therefore, goes without saying that the number is a good one. The journal has been established to foster the growing University feeling and to knit more closely to their *alma mater* the graduates of that good old institution. The object is exceedingly commendable, and is all the more so from the fact that their means to the end is such a journal as cannot but exert a good influence outside the circle of the alumni.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., OCT. 10, 1888.

Editorial.

HYDROFLUORIC ACID GAS IN PHTHISIS.

Hydrofluoric acid is one of the latest suggestions in the line of the therapeutics of phthisis, and the reports of its effects are quite conflicting, although, on the whole, they would seem to warrant further trials. The remedy is administered in the form of gas, for the generation of which various forms of apparatus have been devised. The experiments of DR. GAGER, of Hungary, seem to have been very successful. He placed the patient in an inhalation chamber, which was a well-boarded compartment provided with a well-fitting window and a door.

In this the patients—one, two, or three at a time, according to its size—were seated, their clothes being protected from the injurious effects of the acid by sheets. The gas was manufactured in an adjoining compartment, and conveyed to the ceiling of the inhalation-chamber by a leaden pipe. For the preparation of the gas, he devised an apparatus out of a pair of bellows, a gas meter, a three-necked gutta-percha bottle of the capacity of a litre, with some India rubber and leaden tubing. This apparatus answered so well that he has employed it continually. A solution of hydrofluoric acid was used of the strength of 46 to 54 per cent. Sometimes this solution contained minute quantities of sulphuric acid or of sulphuretted hydrogen, but no evil effects were produced by these impurities. They came off almost entirely in the first five or ten minutes, so that if after that time the inhalation chamber was well aired the gaseous contents were subsequently pretty pure. As the inhalation-chamber was closed, the air soon became vitiated by the patient's breath. It was therefore always necessary to open the door and window for two or three minutes so as to ventilate the apartment from three to eight times during the hour the inhalation was continued. As a rule, the patients were ordered one sitting of an hour's duration daily; occasionally, however, two sittings were given. The volume of air impregnated with hydrofluoric acid driven into the chamber was, during the earlier sittings, from 80 to 100 litres per head during the hour.

After the first five sittings, when the patients had become a little habituated to the gas, the amount was increased to from 100 to 600 litres per head. Into the gutta-percha bottle was poured 100 grammes of distilled water, and to this 30 grammes of the solution of hydrofluoric acid of the strength of 30° to 32° Beaumé added. The bottle was not emptied after the sitting, but before the next time it was required, a fresh portion of 30 grammes of the acid solution was added, and this was repeated until the amount of fluid in the bottle reached nearly 300 grammes. It was then emptied, and 100 grammes of distilled water put in again, the acid being added as before. The external temperature appeared to influence the quantity of gas taken up by the air, as it was forced through the solution, considerably. On warm days the patients always remarked that the "inhalation was stronger." On these occasions a little pure air was pumped into the inhalation chamber. All the patients on whom this treatment was tried presented tubercle bacilli in their sputa, the author's investigation being specially directed towards the "antibacillary" property of the hydrofluoric acid. Care was also taken to examine the state of the kidneys and the urine so as to exclude all cases with renal complications. All the patients complained during the first three sittings of smarting and itching in the nose, of smarting in the eyes, and often of sneezing, which lasted for days. Some patients had increased cough, and even streaks of blood in their sputa—the inhalations having, indeed, to be stopped for some days on that account. Thirteen of the seventeen patients found their appetite increased after the inhalations. In one case there was a slight epistaxis. The following is a *résumé* of the results obtained: (*a*) In five cases the bacilli disappeared from the sputum, a marked improvement of the symptoms being also noted. (*b*) In seven cases there was a distinct improvement in the physical signs. (*c*) The body weight increased in twelve patients, but the amount of increase appeared to bear but little relation to the improvement of the general physical condition; *e. g.*, in one case where the bacilli disappeared, and where the physical signs improved, there was no increase in the weight at all, and in another there was no improvement, though the weight increased nearly four pounds. (*d*) Three of the patients had pyrexia; of these, one lost it entirely, together with all the expectoration and bacilli; in the second case the fever decreased, but in the third it continued as high as ever. (*e*) One of the patients suffered from night-sweats; these entirely disappeared. (*f*) In seven cases the vital capacity increased to the extent of from 100 to 600 cubic centimetres. (*g*) In two cases somewhat severe irritation of the laryngeal mucous membrane was set up, thus showing that this kind of treatment is contra-indicated in cases of laryngeal phthisis—at all events, only an exceedingly small quantity of the gas ought to be given. (*h*) In five cases, including one where laryngeal complications existed, no improvement could be noticed; one very advanced case died. (*i*) No evil after-consequences presented themselves in any of the cases.

TIGHT LACING.

A few nights ago a young lady in attendance at a ball in a suburb of this city, fell while engaged in a dance, and, on being removed to an adjoining room, expired. It was discovered that, being inclined to *embonpoint*, it was her custom to lace to the extent of reducing her waist to a circumference consistent with the recognized standard, and to this custom, no post-mortem examination having being made, the death was attributed. Whether or not the etiology was correctly ascribed, the circumstance is sufficient to direct attention to one of fashion's most dangerous exactions. Any attempt to banish corsets from the modern lady's wardrobe would be futile in the extreme. She must wear them for the "support" which they supply, and the best that can be hoped for is that the more flagrant abuses accompanying them may be corrected. Nature is very kind and endures without resentment many indignities, and in the extent to which she permits the thorax to be distorted, we have a striking instance of her consideration for feminine vanity, as it takes form in "enlightened" lands. In the darker quarters of the earth, the head is sometimes squeezed out of shape and, again, the feet are kept from developing, and yet nature often permits the fools to attain a green old age.

This subject was freely discussed before the Biological Section of the British Medical Association, at its late meeting, and the hygienic and the æsthetic bearings of the custom received attention. The Lancet, in referring to the matter, held the chief source of danger to lie in the fact that the compression of the chest by means of tight lacing is resorted to after ossification has been become quite complete. The stays which sensible mothers allow their girls up to the age of fourteen or fifteen, are soft and exert little more pressure that the waistcoat of a boy. At that age, when the figure naturally changes, the firmer support is taken into use, and the amount of harm it occasions is dependent on the degree to which support becomes compression. There are, no doubt, many girls who, desirous of making themselves conspicuous and, as they foolishly believe, attractive, tighten their waists to such an extent as to incapacitate them for taking exercise and for the necessary ingestion of food; they consequently become weak, pallid, and chlorotic. These evils are, moreover, intensified by the rapidity

with which the compression has been applied, and all who are interested in their welfare should exert themselves to point out the egregious folly of such a practice. Upon the æsthetic side of the question there is little to be said; here, as in so many other controversial questions, *de gustibus non est disputandum.* Amongst the Greeks, for ages the arbiters of taste, the women wore an apology for stays, and we are told that at a very early period the girdle was strengthened by metal, and long before the Christian era a broad band or belt was worn next the skin to support the breasts. According to Planché, the practice of tight lacing appears to have been introduced by the Normans as early as the twelfth century, and has been in use ever since. We apprehend the ordinary Englishman, though he may wonder at, does not really admire a wasp-like figure. Both hygienically and æsthetically, tight lacing is a mistake. Yet it must be remembered that, partly as a result of climatic conditions, partly from abundance of food, and absence of severe work, and partly perhaps from the hereditary effect of sexual selection, a large portion of the young women of England, of the middle classes at least, are disposed to the accumulation of fat in the breasts, and though from the age of seventeen to twenty-four the breasts may be firm and prominent, yet after that period they are apt, without artifical support, to become flaccid and pendulous. The advantage of support, however, is no argument for the employment of compression. DR. HOYLE made a good hit in saying that no woman regarded herself as properly dressed unless she felt a little uncomfortable. He might have added that the proportion of discomfort experienced may be pretty safely taken as the measure of mischief being effected in the willing victim of tight lacing.

HOT AIR INHALATIONS IN PHTHISIS.

The therapeutics of phthisis which may be based on the bacillary theory of the causation of the disease, must consist in the employment of means calculated to destroy the germs in their habitat. The difficulty which has been thus far encountered is in the fact that the agent which will destroy the germ will also destroy the integrity of the tissue, and even the life of the individual. The agent which will enter the system and destroy within it, without injury to the individual, the cause of the disease is the desideratum which is anxiously awaited. The Lancet refers to the investigations of two German observers, or, to speak more correctly, two observers in Germany, who have, independently of one another, been engaged in investigations on the bactericidal property of heated dry air, and on the methods of utilizing this property for the practical treatment of phthisical patients. DR. WEIGERT, who appears to be an American living in Berlin, finding that tubercle bacilli outside the body die at a temperature of 41° C. (106° F.), and are adversely affected by one of 38° (100.4° F.), had constructed all apparatus for the inhalation of heated air, and commenced to make trials on phthisical patients in the early stage, recommended to him by other medical men, he himself not being in practice. At first a temperature of from 40° to 60° C. (104° to 140° F.) was employed, the air for inhalation being quite dry. This temperature was gradually raised as high as 80° C. (176° F.) The patients bore this hot air exceedingly well, and continued to inhale it for three or four hours a day during a month, the only unpleasant effects produced being hyperæmia and dryness of the mucous membrane. The general effects are represented as having been remarkable, patients who had been falling away picking up strength and becoming quite robust, the physical examination showing at the same time that the dullness and râles had perceptibly decreased. The bacilli in the sputum, which had been very numerous, rapidly diminished in number, and finally disappeared altogether. These observations were confirmed by several other medical men. DR. HALTER, of Lengerich, Westphalia, seems to have gone even further than DR. WEIGERT, he having himself inhaled, and caused patients also to inhale, dry air heated to 90° C. (194° F.), with satisfactory results.

SULFONAL—THE NEW HYPNOTIC.

Testimony bearing on the value of this more recent addition to our list of sleep-producers is accumulating, and the proper status of the agent is in a fair way of becoming fixed. DR. B. SACHS contributes to the Medical Record a report of eleven cases in which he has employed the drug. The results obtained, while going to prove that the drug is a vabuable one, show that it is not an infallible one. The following conclusions seem to be warranted from his experience:

1. Sulfonal is valuable in cases of functional (neurasthenic) insomnia. In those cases in which insomnia is often the most distressing symptom, it appears to justify the claim of its discoverer that it restores the natural desire for sleep, two grammes (gr. xxx) being sufficient to bring about this result.

2. It is easily tolerated by the stomach; does not produce headache, except in large doses of 3.0 and more; has no effect upon the circulation, and can be given in cases of irritable and fatty heart, and apparently in cases of fever, in all of which respects it appears to be superior to other hypnotics.

3. It has very slight or no narcotic virtues.

4. With some patients the drug appears to lose its effect if frequently administered.

If a larger experience than DR. SACHS has had will prove sulfanol to be a safe hypnotic in fever cases, all medical men will recognize it as a great boon. In the treatment of insomnia accompanying mental troubles its success is assured; in the treatment of neurasthenic insomnia it promises very well indeed, and the treatment of this trouble can be inaugurated by the exhibition of this drug; but if the condition is to be permanently cured, we are in need, not of additional hypnotics, but of more effective means of regulating cerebral circulation.

Notes.

DR. CRUMPTON relates an experience, in the Medical Reporter, which may be of value as a warning to others. A rich man was sued for a divorce by his wife, one of the grounds being that he had accused her of giving him gonorrhœa. The doctor, who was subpœnaed for the wife's side of the case, testified that she had suffered only from leucorrhœa and gave it as his opinion that she was a virtuous and much-wronged woman. The urethritis of which the husband complained was non-specific in his (the doctor's) opinion, and of the kind which is liable to happen in any well-regulated family. She got her divorce, but the court for some reason, did not grant her alimony. A short time afterward a young man consulted the doctor for some trouble in his "private parts." The diagnosis of an old-fashioned clap was promptly made. The young man maintained that this was impossible, and on being pressed for his reason for this opinion, declared that he "had never fornicated with but one woman in his life, and would not have touched her had the doctor not given her such an excellent character when he was a witness in her divorce case." The moral in this case is not hard to discover. Judge not from appearances, but judge righteous judgment.

The Physician and Surgeon, a journal published at Ann Arbor, and supposed to reflect the views of the Faculty of the Medical Department of the University of Michigan, takes strong exception to the manner in which the Board of Regents have treated the recommendation of the Faculty that DR. E. W. JENKS be appointed to fill the chair of Obstetrics and Gynecology made vacant by the death of DR. E. S. DUNSTER. The Faculty, it intimates, know better than the Regents who is best fitted to be a professor. It is, therefore, a piece of unwarrantable impertinence for them to refuse to endorse the Faculty's nomination. This, however, is not the first instance in which the recommendations of the Faculty have been brushed aside, and those who are familiar with the secret history of this apparent obstinacy, on the part of the Regents, will smile at the indignation which has been aroused in the present instance. It is, however, too bad that so good a man as DR. JENKS should be used in any game of shuttlecock.

An excellent way for a man to escape being laughed at, is for him to furnish no incentive to ridicule. Our transatlantic friends are very wont to seize upon the utterances of American ignoramuses and parade them as an index of the status of the profession of this country. Here is the latest quotation that is doing this service abroad; it is said to be taken from one of our home contemporaries: "I get an amplification of 500 diameters, which will settle positively to my mind whether the patient has pretuberculosis (so important as easily treated) tuberculosis, rheumatism, pre-embolism, anæmia, fibræmia, syphilis, etc., or not. Sometimes the blood has to be studied for five, ten or fifteen minutes, or more, but often one can make his diagnosis in short order." The journal which prints such stuff as this ought to be tabooed. The excuse that it is not responsible for the views of its contributors does not cover a case like this.

The next Legislature of the State of Michigan will be petitioned by the Regents of the University to grant an appropriation for the establishment of two lying-in departments, and thus, perchance, afford the students an opportunity for the study of practical obstetrics. The two departments are asked for in order that women may be delivered "regularly" and homœopathically. The wisdom and justice of this arrangement must commend itself. In this free country the woman has a right to select her method, especially when the State, of which she is an important factor, foots the bill. The homœopathic annex of the University will, we presume, aim to deliver her of the most infinitesimal baby with the most infitesimal degree of pain. With the two departments in good working order, a good opportunity will be furnished for testing the merits of these two kinds of delivery, and both the profession and the laity will be on the *qui vive* for results.

A large proportion of the eminent attendants on the late Congress of Physicians and Surgeons held in Washington, were attacked with diarrhœa. The Medical Record says this diarrhœa was probably bacillary, and had its origin in the drinking water taken from the Potomac. This, however, is a mere assumption. Any hypothesis which leaves out of consideration the vast amount of indigestible and undigested matter which was served up at that particular Congress, must be erroneous.

It is a very fortunate thing that the meetings of that body are to be only triennial. If they were held annually the peculiar intestinal disturbance complained of would be very apt to become epidemic. A little rich and highly-spiced food is all right as a relish. As a regular article of diet, though but for a short season, it is very apt to cause serious gastric and intestinal disturbance.

There has been opened in this city a hospital which is to be conducted on the dogma, *similia similibus curantur*. The building was built out of donations by two wealthy citizens and cost upwards of $100,000. The lot on which it is built was donated and there remains on hand, we are informed, $100,000, the interest of which is to be devoted to defraying the running expenses of the institution. The structure is certainly a thing of beauty and will be a lasting monument to the goodness of the hearts, rather than to the good judgment, of the gentlemen who are responsible for its erection. There was about as much need of this institution as there is of a dog's having two tails. The accommodations for the sick were far from being taxed in existing hospitals, and there already existed a training school at one of the older institutions which has always been able to supply competent nurses to the public.

The Medical Standard devotes several of its pages to medical news items gathered from all parts of the Union, arranging those from the various States under their respective names. It is quite an interesting department of the journal. There seems, however, to have been a great dearth of medical news from Michigan last month, the only item from this great state being the statement that a doctor had been sued for $5,000 damages for seducing a 15-year-old girl. There is also only one item from Montana, and that is a record of the fact that DR. KLINE, contract surgeon of Fort Sheridan, killed a man in a tavern brawl. From West Virginia comes the intelligence that DR. W. S. HOY, who killed his colored mistress, has been declared insane. These little incidents but go to prove that though somewhat demoralized the profession is still in the ring.

"Is marriage a failure?" is a question propounded by an eastern secular contemporary, and it has published a large number of replies thereto. Singular as it may appear, there is not anything approaching unanimity in these replies, there being many who answer in the affirmative. Unfortunately, it is a failure in too many cases, and especially in refined circles, where the legitimate fruits of matrimony are not suffered to mature. It is the failure in this direction which is both fast changing the complexion of the American people, and building up the specialty of gynecology. If the advice of the New York alderman were adopted, and nature were allowed to take her course, there would be less fault-finding in regard to this relation of the sexes—there would be more American children and fewer American gynecologists.

When the policemen of Philadelphia discover a case of hydrophobia running at large, they seize the unfortunate victim and bind him with a rope to a convenient tree. They then summon the patrol wagon and bear him away to the police station. This is unquestionably a judicious procedure, but it involves the necessity of greater powers of diagnosis than is possessed by the average cop. In the latest reported instance in which it was resorted to, it turned out that the sufferer had simply an attack of old-fashioned colic.

DR. LOVE likens the trade-doctor (he who practices physic for revenue only) to the trade-dollar, which falls below the standard in the matter of weight of the true metal. And yet, dear brother, it is well to bear in mind that the genuine dollar is not composed entirely of the precious metal. If it were all silver or all gold, it would be too soft, you know—it could not stand the wear and tear of circulation. Some adulteration is rendered absolutely necessary by the environment of the coin.

A business firm received a postal card from a customer among the mountains of eastern Tennessee, of which the following is a verbatim et punctatim copy: "please send me side of bacon a bbl flour 10 lbs of coffee and a wheelbarrow my wife had a baby last week and a monkey wrench crops is middlin." The post partum appetite of the Tennessee woman, has, apparently, not been injured by the peculiar product of her conception.

The statement is hardly credible, but it is, nevertheless, made on good authority, that there is not in all France a medical school which has a professor of gynecology, and, moreover, that there is not in the whole country a special hospital for diseases of women. Happy France! and thrice happy thy darling daughters! What is Boulangerism compared with this great blessing?

Prospects are brightening. The proprietor of a noted summer resort advertised for a physician for the summer months, offering free board and lodgings as an inducement. In spite of this liberality, however, not a single applicant presented himself. We may now soon hear of some physician who has refused to make daily visits to a county poor-house, for the princely stipend of $100 per annum.

Book Notices.

THERAPEUTICS: ITS PRINCIPLES AND PRACTICE. By H. C. Wood, M. D., LL. D., Professor of Materia Medica and Therapeutics and Clinical Diseases of the Nervous System, in the University of Pennsylvania. A Work on Medical Agencies, Drugs and Poisons, with Especial Reference to the Relations between Physiology and Clinical Medicine. The Seventh Edition of a Treatise on Therapeutics, Rearranged, Rewritten and Enlarged. Philadelphia: J. B. Lippincott & Co, Detroit: John MacFarlane.

More than any other American author DR. WOOD has been instrumental in redeeming therapeutics from the empiricism which, it must be admitted, the teachers of less than a quarter of a century ago did much to encourage. His efforts to discover in the physiological effects of a drug, a good and sufficient reason for its exhibition in conditions in which the functions which it influences are disturbed, have been successful to a very encouraging degree, and a more intelligent therapeusis obtains today, as a result of his investigations and writings. It is, of course, too much to expect that the therapeutic effect of a drug can always be predicated on its physiological action. In the nature of things an intelligent empiricism must always occupy a prominent place in progressive medicine, but this place must be secondary to that held by the scientific method, which is based on the carefully noted effects of the drug on the healthy tissue and normal functions, even though the tissues and functions acted on are those of the inferior animals. While dogs, cats, rabbits and guinea-pigs are not the animals it is our province to treat when they are diseased, the only essential physical difference which exists between them and human beings lies in their inferior quantity of cerebral tissue. As to their muscles, bones, nerves, bloodvessels, lymphatics, etc., they are essentially like mankind.

DR. WOOD has made a very successful effort to keep abreast of the times, in the matter of the drugs of recent introduction. He has discovered pronounced virtues in many of these, and the simple fact that they are "new remedies" has not, as in the case of some recent writers, made him think it beneath his standing as a scientific therapeutist, to give them careful consideration. We have, therefore, in the work before us an intelligent study of a long list of the newer introductions, such as strophanthus, sparteine, iodol, ichthyol, paraldehyde, urethan, hypnone, antipyrine, antifebrine, kairine, etc. Some, and notably among them sulfanol, the new hypnotic, are not mentioned, but a new book would have to be issued at very short intervals to include all the new things, so great has been the activity in this direction of late. The chapter on Somnifacients is, however, very complete and is one of very timely interest.

It is very gratifying to note that DR. WOOD recognizes the fact that there are other agencies than drugs, of value in therapeutics. He, accordingly, devotes proper space to the consideration of exercise, more particularly to the passive kind (massage), feeding, and the other means of a hygienic rather than a medicinal nature. This section of the work is a feature which will commend itself to all rational practitioners.

Of the literary quality of the book, nothing need be said. It goes without saying that anything from that source is correct as to its construction. The publishers, too, have given us one of their characteristically excellent productions.

REPORT OF THE EYE AND EAR DEPARTMENT OF ST. MARY'S Hospital and St. Mary's Free Eye and Ear Infirmary, Detroit, Michigan, for four years, ending June 1st, 1888.

For the past four years DR. EUGENE SMITH, the Surgeon-in-charge of this charity has been much abroad which fact together with unusual business cares, have caused an intermission in the appearance of the regular annual reports. The concentration of these four years' work into one report has therefore covered a very large amount of work—4314 cases of diseases of the eye, and 847 of those of the ear. The variety which the vast amount of work presents is about as great as is possible, nearly, if not quite every form of eye disease being included. Of operations on the eye there are 514 cases, and 46 cases of operations on the ear, making a grand total of 560. The report is defective in that it does not give us the valuable deductions which a Surgeon of DR. SMITH'S acknowledged prominence in this special line, is so well qualified to draw from this large amount of clinical material. The following, good as far as they go, are all that he gives:

"Among the cases treated, many have been of great interest, notably, arrest and recovery of three cases of sympathetic ophthalmia; successful treatment of several cases of asthenic ulceration of the cornea with Jequirity; after-treatment of cataract in light room; treatment of trichiasis and distichiasis with galvano-cautery (original with us), and a case of restoration of useful vision after forty years' blindness.

We still adhere to the use of Jequirity, and have lost none of our enthusiasm for its effects.

The local anæsthetic, Cocaine, has largely displaced Ether and Chloroform, and is a great addition to our list of remedies.

Sixty-seven operations were made for cataract, all of which were successful."

Had the report contained a description of the treatment employed in the cases of sympathetic ophthalmia, for instance, its value would have been enhanced.

A Text book of Human Physiology. By Austin Flint, M.D., LL D., Professor of Physiology and Physiological Anatomy in the Bellevue Hospital Medical College, New York; Visiting Physician to Bellevue Hospital; Fellow of the N. Y. State Medical Association; Correspondent of the Academy of Natural Sciences of Philadelphia; Member of the American Philosophical Society, etc. With three hundred and sixteen figures in the text, and two plates. Fourth edition, entirely re-written.
New York: D. Appleton & Co.
Detroit: John MacFarlane.

It is scarcely necessary to do more in noticing this book, than to reproduce its title-page. The profession of this country do not require to be told aught of Dr. Flint or his labors in physiology. It is, however, nearly eight years since the previous edition of the work before us was given to the profession, and eight years is a long period of time in these days of scientific activity, and there was a demand for the incorporation of the advances into a text-book, and Dr. Flint has supplied this demand in the new edition of his work. As the book appears to-day, the latest issue from the press, it stands prominently forward among the text-books on physiology. There is certainly nothing more complete or better adapted to the wants of the student, now before the profession. The old system of weights and measures and the Fahrenheit thermometric scale have been retained, their equivalents in the metric being given in parentheses. This will be helpful to those who have not yet learned to think or to conceive of quantity and distance in other than the system in which they were trained in their earlier years.

Again the publishers have given us a specimen of the best possible work in the line of book-making.

A Text-book of Pharmacology, Therapeutics and Materia Medica. By T. Lauder Brunton, M.D., D.Sc., F.R.S., F.R.C.P.; Assistant Physician and Lecturer on Materia Medica at St. Bartholomew's Hospital; Examiner in Materia Medica in the Universities of Oxford and of London, etc. Adapted to the United States Pharmacopœia by Francis H. Williams, M. D., Boston, Mass. Third Edition.
Philadelphia: Lea Brothers & Co.
Detroit: John Macfarlane.

Dr. Brunton's position among the advanced therapeutists of the day is well established, and his reputation even in this country is such as will secure for the work before us a ready sale. The book combines the dry details of materia medica with the practical points in therapeutics in a pleasing and instructive manner. The author is emphatically a physiological therapeutist and he enquires closely into the manner in which drugs exert their curative properties, thus establishing the only rational basis for the exhibition of medicines.

The preface treats very fully the subject of homœopathy, and, it is needless to say, this system of therapeutics finds little favor at his hands, albeit he is very dispassionate in his method of handling it.

The profession of this country are not as familiar with Dr. Brunton's writings as it would be profitable for them to be, and the publishers have done good service in presenting this book. A very full index of diseases and their remedies is given, and the student and younger practitioner will find it of great utility.

The American editor's adaptation of the book to the U. S. P. leaves nothing to be desired in this direction.

The Theory and Practice of the Ophthalmoscope. A Hand-book for Students. By John Herbert Claiborne, Jr., M. D., Instructor in Ophthalmology in the N. Y. Polyclinic. Clinical Assistant in the Vanderbilt Clinic (Department of Ophthalmology). Attending Surgeon to the North-Western Dispensary, Eye, Ear and Throat Department.
Detroit: George S. Davis.

The revelations of the ophthalmoscope are not confined as to their benefits, to eye diseases, and familiarity with the use of the instrument is a useful accomplishment on the part of the general practitioner. Dr. Claiborne has aimed to facilitate such familiarity, and although he has given his instructions in the briefest possible limits, he has left out little or nothing of value in this connection. The book forms a part of the Leisure Library Series and goes to fill out the completeness of this admirable set of publications.

Intubation of the Larynx. By F. E. Waxham, M. D., Professor of Otology, Rhinology and Laryngology, College of Physicians and Surgeons of Chicago; Clinical Professor of Laryngology and Rhinology, Chicago Ophthalmic College.
Chicago: Charles Truax.

The substitution of intubation for tracheotomy has been proposed, and during the last year a number of articles have appeared on the subject. The wisdom of such substitution has not yet been conclusively demonstrated. More experience with the procedure is necessary. Dr. Waxham gives a full description of the method together with the instruments to be employed, and those who desire instruction in intubation cannot do better than to study the book before us.

J. B. Lippincott Company announce that a new edition of the United States Dispensatory is now being bound, and will be ready in a few days. The revision has been thorough, and not merely the addition of a supplement. More than one-third of the book, or nearly eight hundred pages, is entirely new matter, while the whole work has been most carefully re-written. The National Formulary has been incorporated.

Medical Progress.

Reduction of Strangulated Hernia by Ice Poultices without Taxis or the Knife.—Alban Smith Payne, M.D., in the Va. Med. Mo., reports the following cases:

Case 1.—During November, 1849, I was called to see Gen. R., in consultation with his family physician, Dr. George M. Brown, of Upperville, Va. I found the old gentleman with a strangulated inguinal hernia, apparently in articulo mortis. He was pale, cadaverous in appearance and shrunken, although you could see that in early manhood, he had been of splendid physique. He was then above 80 years of age. Dr. Brown had been up with him all night, had tried taxis, and having exhausted all remedial measures he told the General's son frankly that from his father's extreme age he could not stand an operation, and the case was therefore hopeless. When I reached Col. R.'s everything looked gloomy enough. But I at once ordered a bag of ice to be applied over the tumor, and as soon as I thought the cold application sufficient I quickly followed the same by a large hot poultice. When I removed the poultice, I made gentle massage over the whole abdomen. In a few moments, he had an action from his bowels, and the hernia was reduced. This old gentleman a short time afterwards travelled in a carriage all the way to Arkansas, and lived several years without any further trouble from his hernia, dying finally of extreme old age, upwards of 90.

Case 2.—David Trisser, over 80 years of age. I found the old man in a deplorable condition. As soon as he recognized me, he whispered, "Yes, you know, Payne, the old man must die. He has sneaking chills and high fevers. Yes, the doctors have been here all night; they say the old man must die; that his bowels is mortified. Yes, Payne, you know the old man will give you one thousand dollars if you relieve him," etc. When I saw the stercoraceous vomiting, which, by the way, was present also in my first case, I thought the old man's chance for life blue. I applied a bag of ice to his hernia. When the parts were cold enough, a large, hot, greasy poultice was applied all over his bowels. I was naturally elated by the contemplation of so fat a fee, for I knew he had plenty of money and no relatives to leave it to. As I was gently using massage over his bowels, I felt the tumor receding; I rested a moment. The shrewd old Dutchman took advantage of my moment's rest, slipped his hand down on the receding mass, and said, "Yes, you know, Payne, its gone back itself. Yes, you know the old man feels as well as he ever did. surer than life. Yes, the old man must get up and attend to business," etc. He lived to be 91 years of age. I stayed every other night with him for a year before he died; he never had any more trouble from his scrotal hernia. Drs. Barton and O'Neil had been with him all the night before the attack spoken of, and gave it as their opinion that he must die; that he was too old and feeble to use the knife on, and they had exhausted all other remedies. But he did not give me the promised $1,000.

Case 3.—I saw Dorety, colored, aged 30, strong, muscular, powerfully built man, in the fall of 1857. I gave him injections of tobacco infusion, tried taxis to my heart's content, gave a one-grain dose of gum opium, all to no effect. After having worked on Dorety all day, suddenly in the evening stercoraceous vomiting supervened, and his appearance was so bad that I was forced quickly to apply the ice bag, which was followed by a big, greasy, fat and mush poultice. I then gently rubbed him all over his bowels, and in a very few moments there was a desire to go to stool. By bringing on this peristaltic action of the whole tract of the bowels, the strangulated scrotal hernia was lifted upwards and backwards, and Dorety was all right. He is yet alive, to speak for himself.

Case 4.—One of our most prominent citizens consulted me about four years ago concerning an inguinal hernia. I found the aperture very small, and I advised a carefully fitted Ayres' Hernia Truss, whose make I saw recommended by my friend, Dr. Hunter McGuire. In about one year after he had been wearing the truss, he sent for me one night in great haste. I found him suffering severe pain, and great tenderness of the hernial sac, which was evidently caused by slipping of the truss and catching the bowel, and holding it outside. His countenance was bad—Hippocratic. Without delay, I applied the ice-bag, and then the large, greasy, hot poultice, and used gentle massage. He quickly said, "I feel like going out." In a few moments he returned laughing, saying, "I am all right;" and sure enough he was. The gentleman is about 43 years of age, and his constitutional diathesis peculiar.

In the last forty years I have met with occasional cases of strangulated hernia to the number I suppose of a baker's dozen. In no case has my plan failed to give speedy and complete relief to the sufferer.

My theory is that, by bringing on peristaltic action of the whole tract of the intestines, you compel Nature to do the work, and by Nature's efforts (always in the interest of health) the gut is lifted upwards and back, more easily and better than by either rough taxis or the surgeon's knife.

Balsam Copaiba in Chronic Cystitis.—The treatment of chronic cystitis is always a difficult and unsatisfactory business, and coming, as it frequently does, among a class of patients who are not disposed to be lenient with the shortcomings of the physician, a method of treatment which commends itself by reason of its probability of success should receive a warm welcome. While the use of balsam copaiba has been known for years as a remedy in the treatment of diseases of the mucous surfaces, no very decided notions have existed as to the proper time and conditions for its exhibition. For the present, we may confine our remarks to its use in diseases of the genito-urinary passages, copaiba having long enjoyed a reputation for the relief of this class of cases. As a preliminary, it may be stated that it is contraindicated in the acute stage of inflammation of mucous surfaces, and is of no perceptible value in the treatment of gleet, while the advantages to be derived from its application in the affection under consideration will be observed only when large doses are administered, at least half a teaspoonful, and if the stomach will bear it, a teaspoonful will answer the purpose all the better. Many of

the most stubborn cases, especially those occurring in women who have passed the menopause, will be quickly and permanently relieved by this treatment. The writer for a long time was unable to account for the rapid improvement witnessed in such cases, although there was no gainsaying the facts, but he found what appears to be a very complete explanation in Dr. Brunton's work ("Phar., Ther., and Mat. Med.," p. 830). It has been shown by this industrious author that copaiba forms a conjugate glycuronic acid in the system, which is eliminated with the urine, and that this conjugate acid renders the urine antiseptic as it is secreted by the kidneys. It is said that under these conditions the urine does not so readily decompose, and that bacteria either do not appear in it at all, or only in very small numbers, even after the surface has become covered with mould. The urine is, therefore, rendered antiseptic, and as the mucous membrane is constantly bathed in this solution, and the urinary passages frequently washed out by the same, no better method could possibly be adopted by the surgeon—not, certainly, with as little trouble. The objection which may be offered to this practice lies in the necessity for medicating the entire system in order to reach the bladder; but that difficulty is met by the statement that one or two days are sufficient to continue the medicament—three days being the longest period required in the experience of the writer, and that in a case of over thirty years' standing.

By way of explanation, the summary of a few cases may be noted. They will serve to guide the physician to the proper selection of his cases:

Mrs. N., aged sixty-five, had suffered occasionally for weeks at a time with inflammation of the bladder, so that she often had occasion to micturate every five or ten minutes for days. The result was that she lost sleep, and became greatly depressed both physically and mentally. On one of these occasions, when under treatment for another affection, this matter was mentioned incidentally, but not with the expectation that anything could be done for its relief, as many physicians had been tried in vain. Teaspoonful doses of copaiba, three times daily, for a few days, removed the trouble, and for at least one year there was no recurrence.

Mrs. O., aged fifty-five, had long been a sufferer, and was placed under treatment in about the same way as the first case related, and a week later, when in conversation with an old friend sitting at her bedside, said: "For twenty-six years I have suffered from this bladder trouble, and during that time I have had no less than thirty doctors, but not until I had taken this medicine for the period of two days have I had one comfortable night's rest." She claimed that often she had been compelled to get up at night fifty times.

Mrs. J. took the medicine for two days, and when she awakened the second morning and found that she was apparently all right, went out and threw the bottle as far as possible out upon the commons.

Lately, however, the capsules have been used in preference to the crude drug or emulsions, and they are found much superior. They can be had containing each ten minims, and the best time for administration is about two hours after eating, when the contents of the stomach are presumed to be neutral in reaction. The medicine then passes immediately into the duodenum, comes in contact with the pancreatic and biliary secretions, and is there emulsified, when it is readily taken up by the intestinal glands and distributed over the system.—*Medical Register*, September 15, 1888.

CALOMEL AS A DIURETIC IN CARDIAC DROPSY.—In no department of practical medicine have more brilliant results been achieved of late years than in that of cardiac therapeutics. This is partly owing to a more extended knowledge of more or less familiar drugs, and partly to the introduction of certain new ones of acknowledged excellence in their several spheres, of which the chief is strophanthus, the discovery of Professor Fraser. Within the past year or two, mercury, in the form of calomel, has specially engaged the attention of several observers. As a cholagogue purgative, indeed, notably in mitral stenosis with engorgement of the liver its beneficial properties have been long recognized, while blue pill is well known to increase the efficacy of digitalis and squill. Nevertheless, the powerful diuretic properties of calomel seem to have been overlooked until quite recently, when the investigations of Jendrassik, Stiller, Mendelsohn, and others directed attention to the subject. I have observed this action of the drug in causing a copious discharge of urine and dispelling anasarca; and it does not seem to be impeded by a complication of a certain amount of structural diseases of the kidney. In two of the cases medium doses were employed till diuresis set in; in a third, in which the effect of mercury was known, a single dose of twelve grains was administered, which was quite as efficacious.

As to the mode in which calomel exerts this diuretic power, there seems to be some difficulty in determining: Mr. Locke, guided by the researches of Dr Noël Paton, suggests that the diuresis is caused by an increased production of urea, consequent on the supposed hæmolytic action of mercury on the blood corpuscles. This view, however, is open to serious objection. It is no doubt true that urea acts naturally as a diuretic; but we find that those cases wherein the blood is loaded with urea are frequently just those in which the secretion of urine is diminished, but which nevertheless tends to increase after the administration of calomel. Also, if an increased secretion of urea be the cause of the diuresis, we should expect such drugs as antimony and salicylic acid to be even more powerful as diuretics, as their exhibition is followed by a greater excretion of urea than in the case of calomel. Again, it could hardly be possible for a few doses of calomel to have such a hæmolytic action as that described, but rather the reverse, and, even granting that it had, the resulting anæmia would be accompanied rather by an increase than by a diminution of the dropsy.

In endeavoring to determine the *modus operandi* of calomel as a diuretic, its influence, if any, on the heart and bloodvessels may first be considered. In moderate doses it is found to have, after the manner of arsenic, a somewhat paralyzing action on the vaso-motor nerves corresponding to a slight fall in the blood pressure. It is evident, therefore, that

its action in this wise may be eliminated from the causation. It may next be considered whether calomel may not exert a stimulant action on the secreting cells of the kidney, after the manner in which certain other drugs, such as caffeine, appear almost exclusively to cause diuresis, according to the experiments of von Schrœder, Langgaard, and other observers. That it should do so is, I think, probable, though only to a certain extent, as it is stated to have but a slight diuretic effect in health. In addition to this, its influence on the composition of the blood, in virtue of its alterative properties, has, doubtless, an important bearing on the phenomenon in question. In a few medicinal doses it causes an increased activity in the lymphatic system, and brings about the destruction of deleterious ingredients in the blood, with an improvement in its nutrition, and consequently renewed vigor in the kidneys.

It need hardly be mentioned that much discrimination is requisite in the employment of the drug, and trial should first be made of the effect of small doses. It is also useful to remember that mercury is best borne by dark-complexioned persons. In suitable cases it combines the advantages of a purgative and diuretic, without leaving injurious effects on the heart or kidneys. To whatever extent it may ultimately be found useful, it is pleasing to note meanwhile that attention has been drawn *de novo* to one of the best of those of the old remedies which, like bleeding, have fallen, it is to be feared, into an unmerited neglect, in a too eager desire to adopt the latest novelty or to follow a shifting fashion.—A. G. AULD, M. D., in *Lancet*, Sep. 22, 1888.

GLYCERIN AS A SURGICAL DRESSING.*—The essential points of a good surgical dressing are: 1. It must be non-irritating, either directly or indirectly. 2. It must be antiseptic. Mr. John Wood has said that "antiseptics are the local use of applications calculated to prevent suppuration and putrefaction, and to promote quick healing." This admitted, antiseptics must be not only the use of some chemical which shall destroy septic germs or render their growth impossible; but also the use of such means as shall, by promoting quick healing and preventing suppuration, tend to render the presence of these germs less harmful. In considering these means we are brought to the third essential point, and that is quick and thorough absorption, and here it is that dressings in common use appear most to fail.

In most cases, no doubt, under the usual dressings the healing of wounds is both rapid and good, but in others, whatever has been used, after a short time the discharge becomes caked and hard and forms an impermeable barrier to all further secretion; such dressings become adherent to the wounded surface, causing injury and pain in removal. Most remedies that have been tried, to obtain constant absorption, appear to have some serious objection. The Mackintosh cloth retains all the watery vapors as well as the discharge, and acts like a poultice, the various greasy substances, including vaseline, while in the non-fluid state form an impermeable covering to the wounded surface, and when melted act like oil, which retards or prevents the discharge escaping, for it saturates the dressing and takes up the position the discharge should occupy, and also not being miscible with the discharge, prevents its passing on to any part of the dressing ready to receive it; a water dressing is very well while it lasts, but the heat of the body soon evaporates the water and we are no better off than before.

Now we want a dressing that is non-irritating, antiseptic, will not become adherent, will allow free drainage, will not allow the discharges to get hard and caked, will be freely miscible with the discharges, and not evaporate at any temperature of the body nor occupy the place intended for the discharges. We have, I think, what we want in the glycerite of starch of the Pharmacopœia, with some antiseptic dissolved in it; for example, corrosive sublimate 1 in 1,000 parts. The starch, added for convenience of applying the glycerin, in addition forms a non-irritating surface to apply to the wound and is a mechanical protection; it is most conveniently applied thickly spread on one or more layers of Gamgee tissue or some absorbent wool. This application is not irritating, is antiseptic, and is removed with the greatest ease from any wounded surface. As glycerin is freely miscible with the discharges it is quite absorbent, discharge in passing into and through the dressing becomes mixed with the glycerin, and as this does not evaporate, it is thus prevented from becoming caked or hard and dry. The glycerin, itself hygroscopic, does not usurp the place of the discharge nor prevent the free escape of the watery vapors. Such a dressing after several days will be found moist, soft, flexible, and easily removed; it is heavy with the quantity of fluid it contains, a proof of its absorptive powers. The discharges are not collected in one spot. Next the wound there is a jelly-like layer which is easily removed, having a clean surface, and the sutures, if any, distinct and easily taken out, not being caked with blood.

In my own practice I have found healing of incised wounds under this dressing quick and accurate, and the dressing of lacerated and contused wounds is absolutely painless and very quick; I have found it of much benefit in those chronic granulating wounds which every dressing seems to irritate, and have applied it with success as a daily dressing in two cases of purulent conjunctivitis. I have not had an opportunity of trying, but should think glycerite of starch might be used with advantage in skin grafting.—CHARLES E. S. FLEMMING, M.R.C.S., in *British Medical Journal*, Sept. 22, 1888.

*Abstract of paper read before the Bath and Bristol Branch.

A NEW TREATMENT FOR ACUTE PEMPHIGUS.—In 1882 I had the honor to report to the Waldensian Society, a case of true acute pemphigus in a little girl of six years. To-day I have the good fortune to present a case of chronic pruriginous pemphigus. Madame R. P. was admitted to the hospital Jan. 16, 1888. Early in December, she noticed upon her face an eruption of white vesicles as large as a pea, which, when opened, discharged a clear fluid. This was attended with severe itching, which did not cease when the vesicles disappeared. A scab then

formed, which bled when scratched. Soon this eruption became general. Some blisters, from the size of a pea to a hen's egg, appeared all over her body, at first under the arm-pits, then upon the arms and legs, then upon the trunk. The patient, who at first suffered only from thirst, now took to bed, the weakness being extreme and the pains in her limbs being so severe that she was unable to sit up. She had had no premonitory symptoms, other than the intense thirst alluded to above. The previous history revealed a typhoid fever in 1881, followed by profound anæmia, also a pregnancy of four months. Upon her admission to the hospital her appearance was characteristic of pemphigus. Her entire body was sprinkled with blisters, some not yet surrounded with a red areola, and containing a yellowish liquid; others as large as a walnut or even an egg, surrounded by an erythematous zone, not infiltrated, and filled with a cloudy liquid. In some even the serum presented two distinct layers, the lower full of white globules, the upper still clear. Besides these perfect blisters, there are many within which the broken edges expose a portion of the chorion denuded by scratching. Others are covered with a yellow scab. In some the scab had fallen off, exposing a discolored skin, showing the shape and size of the original blister. The diseased surface of the skin covers at least half of the body, leaving the rest healthy. The patient, tormented by the serious itching, is only at ease while in the bath. The general health is moderately good; there is some loss of sleep and strength, but the appetite is good and the temperature only 38.5°. The treatment adopted during the first week, consisting of prolonged baths of boracic acid, from four to five hours a day, did not give the expected relief. In the interval between the baths the entire body was powdered with boracic acid. Arsenic internally, chloral and bromide of potassium for the sleeplessness and a strengthening diet were added.

During four weeks this treatment was continued without apparent effect. The itching did not decrease, and every two or three days a fresh eruption of blisters, large and small, covered the body. Each hour a higher temperature (38.8°) announced the eve of a new eruption. Her general health now became impaired, the appetite diminished, weakness increased, and the itching became more unbearable.

February 12, it occurred to us to try compresses of carbolized water, in the hope of lessening the itching. The effect was magical. As soon as the compresses were applied the itching ceased, and the patient announced the relief with cries of joy. In about three days we noticed that the new blisters were more scattered. Feb. 20, the carbolic acid seemed to prevent the development of the blisters; they were fewer in number and the skin was more healthy. Feb. 25, some small blisters remain, principally on the face where the acid was less freely applied.

These observations are interesting for the following reasons: the diagnosis was at first obscure, whether it was an acute or chronic pemphigus. It was hoped that a speedy cure would follow, as in our patient of 1882; but the successive eruptions undeceived us.

The etiology offered on the contrary is nothing extraordinary, but confirmed our former observations in such cases. We have to deal with a woman left delicate by typhoid fever, and withal in the beginning of pregnancy, which in itself constitutes a predisposing cause. The treatment appears worthy of remark. During a month of routine practice the woman grows steadily worse. Arsenic and baths have failed to relieve. By the use of compresses of carbolic acid, not only was the intense itching relieved, but the disease itself was arrested. The success of the carbolic acid confirms the microbic theory of M. Gibier, and gives a new strength to that theory of the pathology of pemphigus. In closing, we will state that this treatment was well borne. At first the abraded surface was large, owing to scratching, and the urine became black in twelve hours, so that every three days we suspended treatment for twenty-four hours, when it became normal. Care should be taken to remit the treatment when the color of the urine indicates intolerance of the acid. This treatment is as yet unknown, which is our excuse for presenting this case.—Secretan in *Revenue Medicale de la Suisse Romande—Medical Times.*

A Reputed Solvent for Cataract.—We should not have thought it necessary to take any notice of this very old mare's nest had not the Pharmaceutical Journal been so ill-advised as to publish a letter from a practitioner at the Port of Spain who believes from experiments on his own eyes that the juice of a plant called Cineraria maritima has a curative effect upon cataract. It is only fair to state that this letter does not purport to have been written for publication, but it was unfortunately forwarded by the superintendent of the Botanical Gardens at Trinidad, to whom it was addressed, to Mr. Dyer, the director of the Royal Gardens, Kew, who, discerning in it "many intrinsic marks of accuracy," thought it worth publishing, and sent it to the Pharmaceutical Journal. We must confess that we have not noticed these marks of accuracy, and even if we admit all the writer's facts, we fail to see any ground for his conclusion that the drug has any beneficial effect upon a cataract. The story is briefly this: In 1868, while in practice at the Port of Spain, the writer began to suffer from impaired vision, which gradually increased. In 1878 he visited Europe for advice, but nothing was done, and he went back. He returned to England in 1878, and a cataract was removed from the left eye (which was the better of the two) by a well-known surgeon, but without any good result. He returned to the colony and had to be led about till February, 1888, when he applied the juice of the above-mentioned plant. He commenced its use on February 7th, and on the fourth day (which the writer is careful to explain was February 11th) he perceived a "faint glimmer of light" in the right eye. It is not stated that perception of light was previously absent in this eye—a capital omission, since cataract by itself never destroys perception of light. After a little while he could with this eye discern figures, and even faces under a favorable light, and tell the time on a white watch dial. Similar treatment was adopted for the other eye, from which the cataract had been removed. In this eye there

had always appeared to be "a curtain of the blackest darkness hanging over and covering two-thirds of the orbit." This was accompanied by great weight, pressure, and occasional pain, "but all this has now disappeared by a steadily increasing flood of light and unmistakable vision, so that I can now discern my hand and the separation of my fingers when held up before it." The accuracy of the writer's language is really wonderful, but again he omits to say what vision the eye previously had; a person who could perceive his own fingers suspended in front of his hand might still require someone to guide him in walking about. The narrative, then, stripped of its intrinsic inaccuracies, amounts to this, that the writer suffered from some very chronic affection which impaired his vision, that he subsequently also developed a cataract in one eye; in the other, if there was cataract (as to which there was no evidence), it was not the cause of the vision being worse in that eye, or the operation would have been performed on it. The result of the operation was to confirm what might have been suspected from the history, that the failure of vision was due only partly, if at all, to the cataract. The patient then tries the effect of a drug, the therapeutical properties of which are solvent, stimulating, and absorbent, but which is obtained from "a simple, unpretending little plant," of which the writer believes but three specimens exist in the colony, and these are "husbanded with sacred care." The result of this treatment is that there is a slight improvement in the eye which the patient believes to have cataract, and about an equal improvement in the eye which has not even a lens, the improvement in both cases being uncertain, as we have no reliable record of the previous vision, and the result in both being exceedingly bad. There is nothing to show whether the effect endures when the drug is discontinued, or whether it has any effect on the size of the pupil.—*British Med. Journal*, Aug. 25, 1888.

Prophylactic Measures Against Tuberculosis in Cattle.—At the recent French Congress for the study of tuberculosis, certain propositions were presented by the President, M. Chauveau, and adopted, which relate to special prophylactic measures necessary to be observed in dealing with the contagious diseases of domestic animals, especially those which may be transmitted to man. The French government, upon the adjournment of the Congress, with commendable alacrity, adopted regulations suggested by the action of the Congress, which are to be enforced for the prevention of the transmission of tuberculosis from animals of the bovine species. Cattle are to be placed under the supervision of sanitary veterinary surgeons, and animals found to be tuberculous are to be isolated and sequestrated, and when killed must be killed in the presence of the inspector, who must make a post mortem examination. Meats obtained from such animals, when the lesions are definitely ascertained, are excluded from sale, and are not even to be fed to animals, but must be destroyed. The sale of milk from tubercular cows is forbidden, though after being boiled it may be fed to animals.

In the census report of the United States for 1880, pulmonary consumption stands first in point of frequency upon the list of deaths from all diseases. This great enemy of the human race is steadily slaying in thousands, without popular comment or without inciting any well-directed effort to limit its progress. The appearance of yellow fever, cholera or small-pox in a community throws the country into alarm, and no effort is spared to restrict their spread. Yet the deaths from these diseases are inconsiderable in comparison with those from tuberculosis. Some years ago the National Board of Health started investigations of the diseases of domestic animals liable to be transmitted to the human race, and the inquiry gave promise of tangible results, but it terminated with the existence of the Board. The general government is now pursuing an inspection of cattle with the view of detecting tubercular animals and preventing the spread of disease among the herds; but this service is based upon a law limited in its provisions and which does not compare in scope and completeness with that just formulated by the French government.

Tuberculosis being recognized as a contagious disease and in all probability transmissible from animals of the bovine species to man, it is the duty of the State or general government to enforce stringent measures directed against the spread of this disease, and forbid the sale or use of meats from animals affected by it. As it is probable that infection is conveyed by alimentation, particularly by milk, the sale and use of milk from tubercular cows should be forbidden. In the absence of such a regulation, or its enforcement, safety lies in the practice of boiling milk before using it.—*Med. News.*

Codeine in Abdominal Pain.—A study of the literature of the action and uses of codeine suggested to Dr. Lauder Brunton that this drug was likely to be of service in abdominal pain, and he proceeded to try it, with very satisfactory results. The class of cases in which he has used it is somewhat different from those in which it has previously been recommended, being not gastralgia and painful disorders of the stomach, but pain affecting the intestine and lower part of the abdomen. As examples he shortly describes one or two experiences. In a case of inflammation around the cæcum, with pelvic cellulitis, one grain of codeine given in the form of a pill relieved the pain at once; and repetition of the dose whenever the pain began to return prevented its becoming at all severe. In another case a lady, aged fifty, had pneumonia of the right base, a greatly dilated heart with very irregular action, pulse so rapid and weak that it could hardly be counted, pain over the epigastrium and spreading out from it, and slight jaundice; and a tumor was felt in the right lateral abdominal region, which seemed to be renal. As no *post-mortem* examination was obtained the exact diagnosis could not be established, but the administration of codeine in half-grain doses relieved the pain "as if by magic." In another case, where there was pain in the abdomen depending upon a mass of impacted fæces in the transverse colon, codeine seemed to be especially indicated, as one wished to relieve the pain without interfering with the action of the

bowels. In grain doses codein relieved the pain; and the use of copious enemata, aided by washing out of the stomach, cleared away the impacted mass which had given rise to the disturbance. Dr. Brunton has tried codeine in cases of long-continued abdominal pain for which no definite cause could be assigned, as no tumor could be felt, and the functional disturbance did not seem sufficient to warrant a diagnosis of malignant disease. In cancer of the liver and pancreas he has ordered it with success in relieving pain; also in numerous cases where the age of the patient, the presence of diarrhœa, tenderness on pressure, and visible peristaltic movements, and thickening of the gut, easily perceptible on palpation, led to diagnosis of malignant disease in the intestine, although the absence of a *post-mortem* examination prevented the confirmation of the diagnosis. He generally begins with half a grain in the form of a pill made up with extract of gentian, three times a day; and if this is insufficient to control the pain, he increases the dose to a grain, and gives it as frequently as seems necessary. As a rule, he finds that it does not produce drowsiness, nor has interfered with the digestive functions or respiration. It is therefore especially indicated in cases where a dilated heart and consolidated lung tend to make one afraid of morphine. Codeine is also especially indicated in cases where one wishes to relieve the pain without interfering with the action of the bowels. On the other hand, in the cases where there has been much diarrhœa, as in some cases of malignant disease of the colon or rectum, the absence of any tendency to lessen peristaltic movement is rather a disadvantage to codeine as compared with morphine or opium. He has found that in cases of long-continued enteralgia without organic disease, it has continued to relieve pain for months together, without the dose being increased beyond one grain three times a day; and the same is his experience where the presence of a tumor, in addition to other symptoms, has led to the diagnosis of a malignant disease. —*Brit. Med. Jour.*

Treatment of Pneumonia.—Dr. C. R. Illingworth says: "In my opinion the best guide to the treatment of pneumonia is not its after history, but its pathology. There is (as in all inflammatory processes) stasis of the blood in the pulmonary capillaries, followed by effusion of inflammatory lymph into the air cells. The aim in treatment, therefore, should be to obviate stasis by giving remedies which prevent coagulation of the blood and with them also those which diminish the *vis a tergo*, so as to facilitate the passage of the stagnating blood through the capillary system. The old remedies for liquefying the blood were notably the carbonates of ammonia and soda; then there were those valuable remedies for that purpose, the salicylates of ammonia, soda and potash; and now we have a group of medicines which are even more powerful in that direction —the 'antipyretic' group, including antipyrine, antifebrine, kairine, etc., etc., antipyretic solely in virtue of their power of dispersing stagnating blood, and thus of relieving tension in the circulation. Those remedies which diminish the *vis a tergo* may be all described as cardiac depressants. They are digitalis, antimony, aconite, ipecacuanha, and strophanthus.

"In croupous pneumonia I give ten grains of the salicylate of soda, and from three to five grains of carbonate of ammonia every two hours, with from five to ten minims of the tincture of digitalis, and I frequently secure resolution in from eight to thirty hours. If by that time resolution should not occur, I prescribe the acetate of ammonia and digitalis, because it is useless to expect rapid resolution when the effusion of the fibrin is complete, as in the stage of hepatization, and because the destruction of the fibrin elements of the non-stagnant blood by the continued use of the salicylates, as indicated by their toxic effects, is not only inadvisable, but dangerous. I never give the salicylates in broncho-pneumonia, because, from abundant secretion, there is already deficient aëration, and consequently deficient fibrination of the blood. I give the acetate of ammonia, and for another reason; it is compatible with the perchloride of iron, in the event of the "pneumoparesis" of Dr. Richardson supervening, as it frequently does in cases of broncho-pneumonia and croupous pneumonia in patients with great cardiac debility. That powerful hæmatinic, of course, without any depressant such as digitalis, is then urgently needed, in full and frequently repeated doses. Iron in this form is also the best tonic in all cases of pneumonia and broncho-pneumonia, as soon as all sympathetic febrile disturbance has subsided.—*Lancet.*

A Peculiar Effect of Antipyrine, is reported by Emory Lanphear, M. D., Kansas City. Mrs. C——, æt. 52, has been under my care for two or three years, having first come under my observation when suffering from dementia, following the menopause. She has had tertiary syphilis, and for some weeks took as high as 400 grains daily of iodide of potassium. For some months she had perfect immunity from all troubles, except an occasional attack of dyspnea, probably due to aortic stenosis, the latter condition being quite marked; but finally the old pains returned in the tibiæ and ulnæ, at last becoming so severe as to render sleep impossible. She had for a time received much comfort from the refilling of a prescription containing salicylate of soda and oil of gaultheria.

But it ceased to have any effect in controlling the pain after a few days. While waiting to receive relief from specific treatment, I had to give something to relieve her pain. She had once been addicted to the morphine habit, so I had to find something else. After exhausting the usual drugs—bromides, cannabis Indica, hyoscyamus, etc , I gave her

℞ Antipyrine, ʒvj,
Div. in pulveres vi.

Sig. One every two or three hours until relieved.

Inadvertently I omitted my usual note at the bottom of such a prescription, "Not to be refilled," and, being compelled to miss visits to her for several days, I found that she had the same prescription refilled some four or five times in as many days. She had thus taken nearly or quite one and one-half ounces of an-

tipyrine inside of a week, and had virtually become a victim to the "antipyrine habit." Possibly, had there been no organic lesion of the heart, no distressing symptom would have arisen; but, as it was, she was purple, her lips swollen and black, and her face and extremities "puffed up" to an amazing extent. The drug had ceased to have any analgesic effect. It was discontinued. She was placed upon digitalis and quinine (having a temperature of 100° F.), and in a day or two was in a normal condition.

That this extraordinary effect (she having never been thus affected previously) was due to antipyrine was demonstrated to my satisfaction by this fact: She again resorted to the same drug in a few days, during my absence, and was soon in the same alarming state, from which she promptly recovered upon withdrawal of the drug and the substitution of digitalis and quinine, as before.—*Kansas City Med. Index.*

Terebene in Bronchorrhœa.—Dr. John W. Martin, in a communication to the Medical Press and Circular, August 29, 1888, says that he has employed terebene in three cases of bronchorrhœa, with marked success. His first case was that of a woman 79 years old, who had an attack of right hemiplegia, followed by a severe attack of broncho-pneumonia. At the decline of the inflammatory stage profuse bronchorrhœa set in, accompanied by a state of great exhaustion. A variety of treatment failed to give relief. In addition to the bronchial discharge there were urgent digestive troubles, dyspepsia, flatulent distension of the stomach and intestines, causing much inconvenience to the action of the heart, and seriously interfering with the administration of proper nourishment. The urine was free from albumin. Terebene was first ordered dropped on a lump of sugar, but this proved to be disagreeable to the patient, so that the following formula was substituted:

> Gum terebene,
> Spir. chloroform, ää ♏x.
> Mucilage of tragacanth, f ʒ i.
> Syrup, f ʒ i.
> Water, q. s. ad f ℥ i.

Dr. Martin states that from the day the terebene was ordered there was a steady improvement of a most marked character. Of the other two cases one was a man, about 40 years old, suffering from passive broncho-pneumonic congestion, attended by profuse expectoration. The patient was very weak, and no treatment seemed to give relief until he was placed upon terebene. Immediate benefit was apparent. Marked diminution was noticeable at the end of twenty-four hours, and expectoration ceased within three days. The further progress of the case was in every way satisfactory. The third case was that of a wine merchant's traveller, who had, at the outset, acute broncho-pneumonia. When the acute symptoms subsided, profuse expectoration remained a very troublesome symptom. Various remedies failing to check this discharge from the lungs terebene was ordered by Dr. Martin with rapid and most beneficial results. The expectoration almost disappeared at the end of the third day, and the patient steadily improved. In prescribing terebene or turpentine, he regards it it as necessary to be careful to examine for kidney mischief. If such is present, he would regard it as a contra-indication to the use of terebene. — *Medical and Surgical Reporter*, Sept. 29. 1888.

Hyoscyamine as a Hypnotic.—In the Journal of July 14th is a most interesting article on the above, by Dr. Pitcairn, giving several successful cases, but as he does not enter very fully into the action of the drug, more especially as to bad effects which may be produced, I shall quote a case which occurred in my practice this season. A fashionable lady in middle life, healthy but over-active, suffering from insomnia and occasional prostrating attacks of neuralgia in the head, for which bromide and brandy have been generally employed, asked me to give her some hypnotic that would not disagree next day, fearing a restless night. I prescribed one hyoscyamine tabloid, 1-80th grain, to be taken dissolved in half a wineglassful of water, at bedtime. She had a quiet and most comfortable night, and felt refreshed next day.

This was so satisfactory that I prescribed 1-10th of a grain to be taken if an attack of neuralgia threatened. A fortnight after writing my prescription I was sent for in haste at two in the morning: found my patient in bed, pupils fully dilated, speech muddled. She told me that fearing an attack of neuralgia she had taken a tabloid on going to bed at 11 o'clock; two hours after she awoke with a start, a feeling of fear, great thrist, and burning sensation in the throat; on trying to get out of bed for a drink of water she staggered and fell; her legs felt paralyzed. Her husband assisted her back to bed, gave her a drink of water, but was so alarmed by her saying she was sure she had a paralytic seizure he sent for me. She insisted on her diagnosis, as the left arm and side were numb. There was no neuralgia or pain. Knowing that hyoscyamine is identical with hyoscine, light atropine, and light daturine, I at once determined that the symptoms were due to an over-dose of the remedy; accordingly I proceeded to allay fears of anything more than a temporary alarm caused, so that after partaking freely of strong black coffee my patient was able to be down to breakfast that morning; the dryness in the throat and the numbness in the limbs lasted for three days.

I send these remarks, as they may prevent others too readily believing that hyoscyamine has no idiosynacrasy. Where it suits I believe it to be a most desirable hypnotic.—W. Sinclair Thompson, M.D., in *British Med. Journal*, Aug. 25, 1888.

Antisepsis in Typhoid.—Intestinal antisepsia in typhoid fever cases seems to be in a good way of becoming of the highest importance, says the Paris correspondent of the Philadelphia Medical Times (July 16th). In the treatment of such patients, Professor Bouchard first introduced naphthol, and Dr. Legroux is at present applying it in his service at the children's hospital with great success. As soon as a child is brought in suffering with symptoms of typhoid, the intestines are at once cleaned

out with calomel, given in doses of 0.30 to 0.60 centigrammes, depending on the child's age. The next day the antiseptic treatment is commenced as follows:

℞ Naphthol beta,
Bismuth salicylate, āā 2 grammes, .50.
M. Divide in 10 powders, and give one every hour in a wafer, or mixed with a little milk or brandy.

If the diarrhœa is not important, the bismuth may be left out and only the naphthol given, and if, on the contrary, there is constipation, then the following is used:

℞ Naphthol beta, 2 grammes, .50.
Magnesia salicylate, 2 grammes, .50 to .5 grms.
M. Divide in 10 powders, and give one every hour until the bowels are free, and then continue with the naphthol, as before.

It will be found that there will be a diminution or entire suppression of intestinal meteorism, and that the stools are disinfected, no longer giving the fetid smell of typhoid, and also the mouth and tongue will clear up, the general state will improve, the disease will evolute quietly, and the convalescence will be shortened under this treatment. Naphthaline was tried, but it was found so disagreeable to the patients—most of them refused to take it—that it had to be stopped. It also presents some danger of absorption.—*Boston Med. and Surg. Jour.*

Influence of Condurango on the Secretion of the Gastric and Pancreatic Juice, and on the Bile.—Tchelzew (in Gazette de Botkine, Nos. 16 and 17, 1888) is reported by Bulletin Generale de Therapeutique, July 15th, 1888, to have made the following investigation in the laboratory of Dr. Botkine, and under his supervision:

1st. The influence of condurango on the secretion of the gastric juice.

2d. Its influence on the secretion of pancreatic juice.

3d. Its influence on the secretion of bile.

The experiments were made upon dogs suffering from fistulas. The majority of the dogs were compelled to fast from 18 to 20 hours. Condurango was administered to them in the form of the decoction (15 grams of the root in 360 grams of water, evaporated down to 180 grams). The author obtained the following results:

1st. If the dog has not fasted, condurango does not produce any convincing effect.

2d. On the contrary, in dogs which have been subjected to a fasting of from 18 to 20 hours, condurango produces an increase of the secretion of gastric juice.

3d. The decoction of condurango increases unquestionably the secretion of the pancreatic juice in a very notable manner.

4th. Condurango acts equally on the secretion of bile, but less than on the secretion of pancreatic juice. The increase of the secretion of bile exerts itself as much at the expense of water as at the expense of solid particles.

To sum up, condurango acts to a greater extent on the secretion of pancreatic juice and of bile than on the secretion of gastric juice.

Cocaine Spray in Bronchial Affections.—Dr. Perron, of Bordeaux, made a communication to the same society on the advantages of sprays of solutions of cocaine in various bronchial affections. Under the influence of a 2-per-cent. solution of cocaine which is used in the form of a spray, the most violent fits of coughing are arrested in a few minutes. Phthisical subjects who are troubled with coughing and consequent insomnia at night, experience immediate and durable relief from this treatment. By this means opiates which are always more or less injurious after a time, are avoided. In acute bronchitis the action of cocaine is as advantageous. A notable modification takes place in the state of the pulmonary mucous membrane, and owing to the insensibility thus produced, the inflammation and the secretion are diminished. About ten or twelve inhalations, practiced by means of the spray producer placed near the mouth wide open, suffice to bring about prompt and satisfactory results.

On the Treatment of Comedones.—After I had administered ether to a patient who was greatly affected with comedones, I noticed that they were easily pressed out, due, perhaps, to the solvent properties of ether on these greasy concretions. I resolved to give the ether treatment a fair trial. I used the following on several cases with gratifying results:

℞ Sulphuric ether, ℥ i.
Carbonate of ammonia, ʒ i.
Boracic acid, grs. xx.
Water, to make ℥ ii.
M.

Apply twice a day. The carbonate of ammonia with the grease forms a soap. The boracic acid acts as an antiseptic, and the ether as a solvent.—J. H. McCasey, in *Med. Analectic.*

Substitute for Cod-liver Oil.—The following combination is highly recommended by Lamande for delicate stomachs which refuse cod-liver oil:

℞ Glycerini, ℥ x.
Tinct. iodi, ʒ ss.
Potass. iodidi, grs. xij.
M.

Sig.—A teaspoonful fifteen minutes before meals.—*Gazette Medicale*, August, 1888; *Med. News.*

The Injection of Sterilized Air in the Treatment of Phthisis.—At a recent meeting of the Academy of Medicine, of Paris, Potain reported a case of phthisis complicated by pneumothorax which had been greatly improved by the injection of sterilized air into the pleural cavity. The pneumothorax was cured, and the tuberculous process seemed checked.—*L'Union Medicale.*

Pomade Against Neuralgia.

℞. Menthol, gr. xv.
Cocaine, gr. v.
Hydrate of chloral, gr. iij.
Vaseline, ʒ j.
M.

The Medical Age.

Vol. VI. DETROIT, OCTOBER 25, 1888. No. 20.

Original Articles.

SCARLET FEVER.

REPORT OF LECTURE BY J. J. MULHERON, M. D., PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE, MICHIGAN COLLEGE OF MEDICINE AND SURGERY, DETROIT, MICH.

Gentlemen:—The disease which we shall now consider is one of the most important, both because of the frequency of its occurrence and of the gravity of its prognosis, with which, as practitioners of medicine, you will have to do. There is, indeed, no disease which the experienced practitioner approaches with more trepidation, than certain forms of scarlatina—threatening as they are to life and liable as they are to afflict the victim who survives their assault, with sequelæ of a serious nature.

"Scarlatina" is a synonym for scarlet fever, and is often incorrectly applied by the public, among whom the error is liable to work serious mischief, and for which, perhaps, the profession is not entirely blameless. It is used by some practitioners to designate the milder form of the disease—as a sort of diminutive of scarlet fever. Under this impression necessary prophylactic measures have been neglected. There is but one germ of scarlet fever, and the crop which it yields depends on a variety of circumstances, among which the telluric conditions and individual idiosyncrasy are prominent. The same virus operating in a community may produce the most severe as well as the mildest form of the disease. It, therefore, behooves the conservators of public health to correct, as far as lies in their power, this improper application of the synonym.

Scarlet fever is a disease caused by the entrance into the system of a poison having its origin in another person—a strictly contagious disease. The period of its incubation is variable. The systemic disturbance which it causes sometimes manifests itself within twenty-four hours, and again ten days may elapse before the disturbance occurs. Usually, however, it appears in from four to six days. The stage of invasion is ushered in by vomiting, followed by fever which is usually quite high, the child which was playing about in apparent health often having a temperature of 103° or more in the course of three or four hours. The stage of invasion lasts, usually, about twenty-four hours, when it is succeeded by the stage of eruption, the onset of which is marked by the appearance of a few pale red slightly elevated spots or points upon the sides of the face and down the neck to the chest. In a short time, seldom longer than forty-eight hours, these spots coalesce and the eruption spreads over the whole body, notably on the flexor surfaces of joints, and assumes the bright-red, boiled-lobster hue from which the disease takes its name. After the stage of eruption, the duration of which is variable, from five to eight days, the fever declines and the color fades. The stage of desquamation follows at an interval of a few days, sometimes a few weeks, and during it the epidermis of the involved surfaces is thrown off, either in the form of minute scales or in that of large patches, according to the severity of the inflammation. While this disturbance of the skin is taking place the mucous membrane also exhibits changes; the throat presents an intensely red color and the tongue is heavily covered with a white fur, through which the elongated papillæ peep like grains of cayenne pepper. About the fourth day of the disease this fur is removed, leaving the characteristic red, raw surface dotted over with swollen follicles—the strawberry tongue.

This is a rough outline of the disease, which we shall now consider in detail. Scarlet fever is a disease of childhood, the susceptibility to the poison disappearing, as a rule, by the twelfth year, the maximum being from the second to the fifth year. In exceptional cases the disease may attack adults. One attack destroys the susceptibility of the virus, although two attacks have occasionally been suffered by the same person.

We referred in a previous lecture, to the attempt, which has been the fashion of the past decade, to trace all diseases to the entrance into the blood of a microzyme, and the blood, and the secretions and excretions of the scarlet-fever patient have been sedulously searched for a germ which would establish the hypothesis. Had we anything definite to offer it would be interesting if not profitable to lead up to it by a reference to the diplococci, the chain-shaped cocci, the leptothrix-like filaments and the streptococci which different searchers have from time to time alleged to be the essential cause of the disease. Failing in this, how-

ever, we can only state that if the cause be a microzyme the nature thereof has not yet been determined. We believe, however, that the *materies morbi* comes from without, that it is never of spontaneous origin, and that it is given off by a person who has suffered from the disease. The media through which this virus is conveyed and the manner of its ingress into the body are various. Undoubtedly, it is in the vast majority of instances conveyed by the the air to the lungs and thus absorbed. The vitality of this *materies morbi* is great, and well-authenticated cases are on record in which it has been active at the end of months. The poison is, probably, not directly communicable at a distance exceeding a few yards from the patient. It may, however, be conveyed to a distance on the clothes (fomites) and, perhaps, the disease is sometimes carried from house to house by the physician. The possibility of such a thing is not pleasant to contemplate, and it should admonish to extra precautions. The physician should not remain in the room containing a scarlet-fever patient any longer than is absolutely necessary. Nurses who are constantly in the apartment for a number of hours at a time should change their clothes before going out to be in contact with healthy children. But the disease may be communicated through the media of fluids, and investigation has revealed the fact that cow's milk, which is a very active absorbent of effluvia, is very liable to be the bearer of the contagion. There is reason for believing that a modified form of the disease is apt to occur in cows, thus increasing the liability to contagion through the medium of milk, but in most instances in which that fluid is the carrier it has been exposed to an atmosphere containing the germs, or the cow has been milked by one who has been in attendance on a patient suffering from the disease.

Scarlet fever occurs in various degrees of severity and various classifications have accordingly been made. The most convenient is the one which has longest been in vogue, viz.: scarlatina simplex, s. anginosa, and s. maligna —simple scarlet fever, scarlet fever with sore throat and malignant scarlet fever. In scarlatina simplex the skin alone manifests the existence of the disease, and the eruption is very often but sparsely disposed on the surface. It may even not develope into the reddened patch, the original points remaining discrete throughout and the eruption resembling a "prickly heat." In such cases error in diagnosis is not uncommon and it is only corrected when the nephritic sequela appears. This sequela is, doubtless, often due to this error in diagnosis, the usual precautions against cold and exposure being neglected the kidneys are subjected to undue disturbance.

Scarlatina anginosa is the most common form of the disease. Its course has already been outlined. The rapidly rising temperature and the great acceleration of pulse and the quickened respiration which characterize the stage of invasion, taken in connection with the vomiting which is almost a constant symptom, are sufficient to lead one to suspect the onset of the disease. Older patients will often complain of a chill and young children are not infrequently seized with convulsions at this stage. Headache though not a constant symptom is frequently complained of. It is not unusual for the temperature to reach 105° and the pulse to go up to 140. With the development of the eruption the other symptoms of the disease become pronounced. The eruption differs from that of measles in that it is less developed on the face than on the rest of the body. The mucous membrane of the fauces, the uvula, tonsils, are reddened and swollen giving rise to pain on swallowing. The inflammation may extend to the nares, when a mucopurulent discharge occurs from the nostrils. As the eruption reaches its height—about the third day—the coating of the tongue is exfoliated, leaving the strawberry appearance already referred to. In ordinary cases the fever becomes slightly lower with the development of the eruption; the fever declines by lysis. An increase of temperature at this stage should excite apprehension. The other symptoms persist. Nausea, anorexia, restlessness, headache, delirium are but slightly abated until the eruption fades. The sore throat becomes distressing and swallowing becomes more difficult owing to the extension of the inflammation to the submaxillary and cervical glands, which become hard and painful. The eruption which maintains its high color for a day or two begins to grow paler, the fading commencing in the parts first affected and extending throughout, the backs of the hands retaining their redness longest. About the sixth day it has entirely disappeared, in favorable cases; in exceptional cases it persists from ten to fourteen days. Usually the throat symptoms progress *pari passu* with the cutaneous eruption, although not infrequently they persist after the latter has faded. The œdema and redness may increase and a yellowish curd-like deposit form on the tonsils and uvula, while the mucopurulent discharge from the nostrils increases. Whether this deposit is a true diphtheritic membrane is still a mooted question. It probably is diphtheritic.

The stage of desquamation follows closely on the fading of the eruption. During this stage the epidermis, the vitality of which has been destroyed by the dermatitis, of which the eruption essentially consists, shrivels, loosens up and is shed. The manner of the shedding differs with the part of the surface affected.

On the neck, where the separation first begins to take place, it occurs in the form of fine scales, similar in size and appearance to those of measles. In other regions it occurs in large patches, and from the hands and feet the cuticle is sometimes removed in the form of a glove or a slipper. With the appearance of desquamation, in uncomplicated cases, the tongue begins to lose its characteristic appearance, and again acquires its epithelial coating, the redness of the throat fades, the appetite returns and the general systemic condition improves. The return of the coating to the tongue is a very favorable symptom and usually marks the commencement of convalescence.

We have now presented, in brief, an outline of the disease as it is commonly encountered. Occasionally the epidemic is of a much more serious type, and often cases of unusual severity occur in epidemics characterized by mildness of type. These unusually severe cases, when they exceed the bounds prescribed for the anginose variety, are classified as malignant. Malignant scarlet fever differs from the other varieties only in degree, the greater quantity of the contagion taken into the system or the peculiar fertility of the soil causing an aggravation of the symptoms. The name is, therefore, hardly appropriate as indicating a form of the disease. Two types of this so-called malignant form are spoken of, viz., the deuteropathic and the protopathic. In the first, the severity of the symptoms is secondary to the ataxia or excessive disturbance of the functions of the nervous system. In the second, the debility is primary, the poison going directly to "the source of life." In the deuteropathic type of maliginity, the onset of the disease presents no peculiarities, the depression following in a few days, the delirium being of a less active nature, the pulse small, weak and frequent, swallowing difficult, the belly tympanitic, and stupor finally supervening. In the protopathic type the patient becomes suddenly pale at the outset, is faint and the vomiting is repeated at short intervals. The hands twitch and the countenance betrays great anxiety. The rash, if it appears at all, is faint and imperfectly developed. The pulse is exceedingly weak from the start, respiration is irregular and a profuse clammy perspiration often breaks out. The skin in severe cases is cold and mottled, and this condition is a certain harbinger of speedy dissolution.

But outside of the malignant cases, properly so-called, there occur in nearly all epidemics cases which without being malignant are rendered very grave through the aggravation of special symptoms. Starting out like the ordinary run of cases they develop an unusual intensity in some special direction. This aberration from the prevailing type is most frequently noticed in the throat. The redness here is exaggerated, and the soreness and difficulty of swallowing appear early—almost synchronously with the vomiting and rise of temperature. By the third day curd-like deposits are seen on the tonsils, soft palate and posterior pharyngeal wall. The deposits occur in patches of a grayish-white color and involve the mucous membrane. In the more severe cases these patches coalesce and extending upwards through the pharynx invade the nares and may be seen through the tonsils. Necrosis of the subjacent tissue is not uncommon and an exceedingly foul odor is emitted. The inflammation in these cases is apt to extend along the Eustachian tube and into the middle ear, causing inflammation there which is very apt to result in destruction of the ossicles and the drum, with the consequent loss of hearing and, in the case of the young child, deafmutism. A very large percentage of the deafmutes in our public institutions for the education of these unfortunates trace their infirmity to scarlatina.

The complications of scarlet fever are numerous and vexatious. So frequently, indeed, do some of them occur that they might with considerable propriety be regarded as essential parts of the disease. That most commonly met with is

Nephritis. It is held by some that the kidneys are always affected in scarlatina. Albumen has been found in the urine in about thirty per cent. of the cases in which it has been looked for. DR. GEE, in Reynold's System of Medicine, recognizes three stages of the disease, each of which is characterized by a peculiar condition of the urine. In the first stage the urine is diminished and the specific gravity is increased in proportion to the concentration, urate of soda is precipitated, the color is unchanged, and, when the saline deposit is dissolved, however turbid the urine may be with organic matter it is not at all smoky; the urea is diminished in quantity beyond the proportion of the diminution of water; the relative lack of chloride of sodium is greater still; albumen is present; when the diminution in the quantity of urine is considerable, the microscope discovers casts, some clear and perfectly free from granules or epithelium, some finely granular but hardly any blood discs or renal epithelium. When the disease is less severe (and in all cases as this stage is passing away) there are renal epithelium and epitheliated casts, with a few blood discs. The amount and the duration of the diminution of the quantity of the urine in this stage are, to a great extent, prognostic of the future course of the disease. In the second stage the quantity of urine regains the normal, and soon exceeds it; there is a perfect diuresis; the sp. gr. falls low; the urea and the chlorides return to the

standard or nearly so; the urine becomes bloody (from slight smokiness up to the deepest brown); the amount of albumen is relatively less, though it may be absolutely greater than in the earlier stage, and is not proportionate to the depth of the color of the urine; the microscope shows blood discs, hæmatoiden crystals(?), renal epithelium, epitheliated and granulated casts. As this stage passes off the urine becomes clearer, less red and more yellow (passing through brown and green); the albumen lessens. In the third stage the diuresis continues, but the smokiness disappears; though dull with excess of organic flocculence, the urine is normal in color; the albumen gradually disappears. Even after albumen has ceased to be present, it mostly happens that for some time the quantity of urine secreted is above the normal.

Dropsy is the symptom of nephritis which is most prominent, and it is proportioned to the degree of renal derangement, except, of course, in cases in which the inflammation is so acute and severe as to cause death before the dropsy has had time to develope. Albuminuria, is not always present with nephritis, but dropsy never occurs in the course of scarlatina without the existence of nephritis. Nephritis is not peculiar to any special type of scarlatina, and it, probably, occurs most frequently as a sequel or concomitant of the milder cases. This apparent anomaly is due to the fact that in the milder cases less care is apt to be exercised in nursing of the patient and in protecting him against draughts and exposure,

The cervical glands are very apt to be affected during an attack of unusual severity, the inflammation being an extension from the original seat of attack in the tonsils. The process may extend to the parotid gland, and the infiltration of the adjacent subcutaneous tissues may be so great as to cause the neck to assume a hard, brawny and swollen appearance. In these cases the inflammation usually terminates in suppuration and excessive destruction of tissue, causing large, intractable and foul ulcers. The scars which are left on the healing of these ulcers are apt to cause considerable deformity through their contraction.

The function of the physician in reference to scarlet fever is, first, to prevent its occurrence, and, failing in this, to cure the disease—the word "cure" being here used in its etymological rather than its accepted meaning, for the disease cannot be cured, in the sense of being cut short. Scarlet fever is spoken of as one of the preventable diseases, and it is customary to regard an epidemic of it as one of the penalties of ignorance, if not of positive disregard of sanitary precautions. Unfortunately, however, the disease has been known to invade homes in which the utmost precautions against its entrance have been intelligently taken, and it too often laughs at all the means yet adopted to prevent it. Far be it from us, as physicians, to say a word which would belittle the laudable efforts of our indefatigable health-boards to banish this and all other diseases from the land, but I for one cannot lend my unqualified approval to the claim that scarlet fever can be prevented by any of the means yet devised with this end in wiew. The disease baffles all known sanitary measures. Valuable beyond price, as are all the means which sanitarians have elaborated to improve the physical and consequent moral and social condition of the people, they have not yet succeeded in preventing the development of endemics of scarlatina. When a sporadic case occurs in a community, it can only be prevented from giving rise to other cases, by an isolation so strict as to be practically impossible, and certainly not feasible in general practice. It is very questionable, indeed, whether either the voluntary efforts of physicians in the capacity of sanitarians, or the efforts of salaried health-officers, have done anything towards lessening either the number or the virulence of cases of scarlet fever. Certainly we possess no agent in the materia medica which is useful to this end; and this statement is made with a full knowledge of the claims which have been made for belladonna in this direction. In addition to isolation the hanging of sheets soaked in a solution of carbolic acid, over the doors leading from the apartment in which the patient lies, and the hanging of towels soaked in a solution of chloride of lime, over the backs of chairs in the room, may be resorted to with profit. The strength of these solutions must be regulated according to the toleration of the patient or attendants. If they do not prevent the spread of the contagion, they at least have a tendency to quiet the fears of the household. They may also be of value for their antiseptic influence on the poison, in the patient's own system.

The unsatisfactory nature of the prophylactic treatment of the disease but intensifies the importance of the measures in our hands for conducting it to recovery, when it occurs. It being a specific, self-limited disease, it cannot be cut short, and our efforts must be confined to caring for the patient that he may be enabled to outlive the seizure. Unfortunately, cases may occur which but mock all our efforts, but these are comparatively rare, and the recoveries (whether as a result of or independently of treatment) are so frequent as to be very encouraging, indeed. The results following treatment will depend very much on the character of the endemic—the death-rate being high or low, according to the prevailing type of the disease. When called to see a little patient in the earliest stage of the disease, an emetic of sulphate of zinc and ipecac answers a good

purpose in encouraging reaction. When there is constipation, a laxative of calomel, gr. ½ every hour until it operates, should be given. After the fever has developed the emetic should not be given. When there is hyperpyrexia, a temperature exceeding 103° (and there generally is for the first few days), measures for the reduction of the fever must be given. The temperature should not be allowed to remain at over 103° for twenty-four hours. The bedclothes should be as light as is convenient with the comfort of the patient, cooling drinks should be given, small pieces of ice should be given the patient to swallow, the room properly ventilated and kept at a temperature not lower than 65° nor higher than 70°. As a medicine, give liquor ammoniæ acetatis with an excess of ammoniæ carbonas. This treatment should be continued throughout the case, and should it not avail to keep down the fever, it should be supplemented by other more decidedly antipyretic remedies. Among the latter, quinine at one time stood in high favor, but it is no longer regarded with the old-time favor. The chief objection to its employment lies in the irritability of the patient's stomach. When this does not prevent, it may be given with benefit, for if it does not act as we would have it as an antipyretic, it probably does good as an antiseptic. A child five years of age may be given four or five grains at intervals of two hours for two or three doses. Too often, however, the stomach will not tolerate this medication, in which case the drug may be given by enema, the smallest quantity of water being employed as a vehicle. The dose may be increased fifty per cent. when thus given. Salicylate of sodium, also, possesses antipyretic properties, and may be employed with benefit, and, latterly, we have a number of artificial alkaloids, such as thalline, kairine, antifebrine, and antipyrine. My experience is confined to the latter, and it has been quite satisfactory, although not strikingly so. It may be given in doses of five grains to a child four years of age, at interval of three hours and the dose may be increased and the interval shortened with the toleration of the drug, care being always taken and the thermometer being carefully employed in order that collapse be not produced.

But the most direct and, probably, the best antipyretic that we possess is cold water, which may be applied in the various ways in which it is employed in other diseases characterized by hyperpyrexia. The easiest and safest, however, is cool sponging, care being taken that the application be made under the cover of the bedclothes in order to prevent the exposure of the child's surface. The ice-water baths recommended by CURRIE a century ago would, probably, be valuable in extreme cases, but a few practitioners in private practice would have the temerity to resort to them. When the temperature has been reduced to 101° by means of the cold water the application must be stopped, and the exhibition of antipyretic doses of quinine after the temperature has reached its minimum, will retard its rise.

The anointing of the body with lard has a decided antipyretic action, although we do not know its *modus operandi*. The lard may be carbolised with advantage. The cut surface of the rind of pork bound on the throat is a remedy which has come down to us through many years, and remains to day one of the best applications, if not the very best, in our hands.

The complications of the disease must be combated as they present themselves, and that which we oftenest meet is in the throat. The swallowing of small pieces of ice greatly relieves the distress due to the inflamed and swollen throat. When ulceration of the throat occurs, the application of the following has been useful in my hands:

℞ Zinci sulphatis ʒ ij.
Acidi carbolici ʒ ss.
Aq. font. ℥ iv.
M.

When this cannot be applied by means of a camel's hair pencil, and it seldom can in young children, it should be given through the spray atomizer. It may be applied three or four times a day. Permanganate of potash, 4 to 6 grains to the ounce, may be applied when the odor is offensive.

In some cases symptoms of adynamia are present from the beginning. These demand supporting treatment—iron (tincture of the chloride), quinine, stimulants, digitalis and nutritious food. The general rules which govern the employment of these must apply here. Among foods milk stands pre-eminent. Besides being the most easily digested of foods, it is, probably, beneficial as a preventive of nephritis. JACCOUD holds it to have this property, and we know enough of its value in cystitis to justify the belief that it may have virtue in this direction.

When nephritis occurs the salts of potash are valuable. The acetate is, probably, the best, and a valuable as well as a very pleasant drink may be made by adding a drachm of the bitartrate to a pint of boiling water, which may be properly sweetened and flavored with a sliced lemon. In the anæmia of post scarlatinal dropsy the tincture of the chloride of iron is indicated, and the following is also an excellent combination in this condition:

℞ Quininæ sulph., gr. xij.
Ferri sulph., gr. viij.
Acidi sulphurici dil., ʒ j.
Elixir. simp., ℥ ii.
Syrup., ad. ℥ iv.
M. Sig.—A teaspoonful every four hours—for a two-year-old child.

The skill and ingenuity of the physician will have room for exercise in devising means for contributing to the comfort of the little patient suffering from scarlet fever. No specific instructions can be laid down to supplement his good judgment in such cases, and he will often find it necessary to fall back on "general principles."

LAPAROTOMY FOR FIBRO-CYSTIC TUMOR—RECOVERY.

BY CHAS. H. MERZ, A. M., M. D., SANDUSKY, O.

The following case is one that was under the care of the late DR. A. C. MILLER, of Cleveland, O. The full description of the case as subjoined, will show that it possesses some features of special interest that make it worthy of record.

Eliza P., aged 35 years, unmarried, gave the following general history of her case: She commenced to menstruate at the age of twelve, at which time she was regular, but suffered some pain the first day of her menstrual period.

When she presented herself for examination, she complained of pain in both vaginal regions, more severe on the left than on the right side, some epigastric distress and headache.

She was at this time, very irregular as regards menstruation, the flow was rather profuse, lasting from five to seven days, but she suffered little pain. Upon making bi-manual examination, the anterior vaginal wall was found to be tense, while the posterior wall was relaxed. The os uteri was soft, flabby, dilated and granular. The uterus could not be examined but lay downward and backward—occupying the *cul de sac*. A tumor could be felt about the size of a cocoa-nut very firm at certain points and soft and fluctuating at others.

The diagnosis was made of a fibro-cystic tumor with a sensile base, situated on the anterior surface of the uterus.

The patient was treated for several months with electricity, the negative pole in the uterus and the positive on the abdomen. No accurate record was made of the strength of current used in these treatments, but a current from four to eighteen cells of a Mackintosh battery was used. These applications were made every four to six days but were followed by no appreciable results.

It being decided to operate, the patient entered the hospital on January 8, and was ordered a laxative mineral water, and a carefully selected diet. In this case, as in all others of a like nature, the hot vaginal douches were considered an important part of the preparatory treatment. These were given in the form of a continuous irrigation twice a day.

On Feb. 16, she was ordered half an ounce of castor oil.

On Feb. 17, at 11 A. M., the patient, after having been carefully prepared and etherized, was placed upon the table. A short incision was made in the median line between the umbilicus and pubes. All the antiseptic precautions were observed. The room had been fumigated with sulphur and the spray had been used in the room for an hour previous to commencing the operation. The abdomen was shaved, scrubbed and washed with a 1 to 2,000 bichloride solution.

The tumor was not fully exposed to view and the incision was enlarged with the probe-pointed scissors until it extended to the umbilicus.

The tumor was held firmly in several places by adhesions, which had to be separated before it could be brought up. A ligature was then carried through the pedicle and an attempt made to tie a Staffordshire knot. This being found impracticable, Lawson Tait's clamp was applied on a level with the internal os uteri. The clamp was screwed down firmly and, as later developments proved, pressed upon the circular artery of the uterus, cutting off the supply of blood to the portion of the cervix remaining below the clamp. The first incision made to sever the tumor allowed some venous blood to escape, and a trocar was plunged in for evacuating this fluid. This failed, owing to the multilocular character of the tumor.

The entire portion of the tumor above the internal os, together with both ovaries and oviducts were removed.

With a view of better controlling hemorrhage and suppuration, the pedicle was retained in the suture line of the abdomen. The peritoneal cavity was carefully sponged out; the peritoneum was closed with a continuous silk suture and the abdominal wound closed with interrupted silk sutures. These sutures were reinforced with strips of adhesive plaster. The wound was dusted with iodoform, covered with oil silk and absorbent cotton, held in place by adhesive plaster.

The patient reacted quickly. At 6 P. M., the temperature was 100°, pulse 116.

Feb. 18, at 6 A. M. Temperature 101⅕°, pulse 108. Was given 10 gr. quinine and ¼ gr. morphine hypodermically. The urine was drawn. She was allowed cracked ice and sips of hot water; P. M., temperature 101⅘°.

Feb. 19, A. M. Temperature 100¾°. Urine drawn. Morphine ¼ gr. Very severe pain in the stomach. Was given sod. bicarb. in hot water. At 9:30 the dressings were changed for the first time. Quinine 10 gr.; P. M., urine drawn; temperature 101⅕°. The wound was discharging freely and was dressed again.

Feb. 20, A. M. Temperature 100⅘°; ¼ gr. morph. At noon the dressings were changed, and the portion of tissue included in the clamp was sloughing freely. The clamp was pressing on

the margins of the wound, causing considerable pain. 2 P. M., ¼ gr. morph. 6 P. M., wound dressed; 10 gr. quinine; ¼ gr. morph.; temperature 100⅘°. 11 P. M., ¼ gr. morph.

Feb. 21, 3 A. M., ¼ gr. morph. 6 A. M., temperature 100⅘°. 11 A. M., was ordered a little lemonade, which she relished very much. 2:30 P. M., ¼ gr. morph. 6 P. M., urine drawn; temperature 100⅘°; quinine 10. gr.

Feb. 22, 6 A. M. Temperature 100°; quinine 10 gr. 9 A. M., morph. ¼ gr. Sutures removed from portions of wound above and below the clamp, and new dressings applied. 6 P. M., wound dressed; temperature 99⅘°. Was given chicken broth and soft toast.

Feb. 23, 1 A. M. Morph. ¼ gr. 6 A. M., temperature 100⅘°. Wound dressed; presents a healthy appearance. Clamp was found to be moveable and after loosening the screws, it was with a little manipulation removed. Listerine was used as a dressing. 3 P. M., ¼ gr. morph. 9. P. M., temperature 100⅘°; quinine gr. x; morph. ¼ gr.

Feb. 24, 3 A. M., ¼ gr. morph. 6 A. M., temperature 100°; quinine gr. x; wound dressed. 9 A. M., morphine ¼ gr. Was given a vaginal douche and rectal enema. 1 P. M., ¼ gr. morph. 7 P. M., temperature 100⅘. Wound dressed and a drainage-tube inserted. Discharging pus freely.

Feb. 25, 1 A. M., ¼ gr. morph. 6 A. M., temperature 100°. 1 P. M., ¼ gr. morph. 6 P. M., temperature 100°.

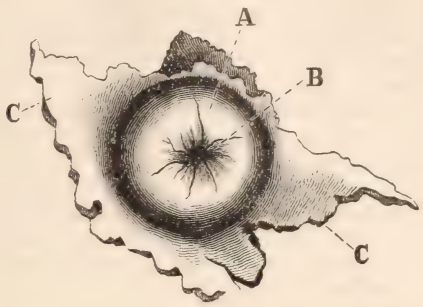
Feb. 26, 12 A. M., ¼ gr. morph. 6 A. M., temperature 100⅘°; quinine gr. x. 6 P. M., rectal enema was given.

Feb. 27, 1 A. M., morph. ¼ gr. 9 A. M., ¼ gr. morph. 9 A. M., ¼ gr. morph. Wound dressed. Oakum used to absorb the discharges. 6 P. M., temperature 100⅘°.

Feb. 28, 2 A. M., ¼ gr. morph. 6 A. M., temperature 101°. Wound dressed. Quinine gr. xv. 6 P. M., temperature, 99⅕°.

March 1.—7 A. M., temperature 98½°. The oakum was found to be too irritating and was removed. 8 A. M. Bowels moved. There was a great deal of pain felt. Morph. ¼ gr. 3 P. M., morph. ½ gr.

March 2.—6 A. M., temperature 100⅘. 6 P. M., temperature 100. Morph. ¼ gr.



A.—External os. B.—Cervix uteri. C.—Portion of the vaginal wall.

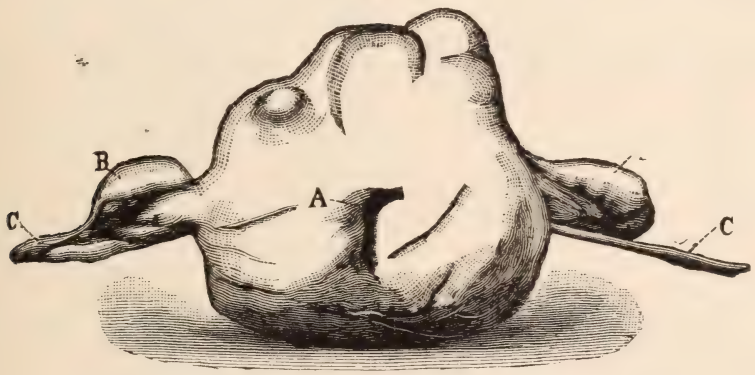
March 3.—6 A. M., temperature 99⅕. The wound has nearly closed, only a circular opening remains where the pedicle was included. 6 P. M., temperature 99⅘.

March 4.—A. M., temperature 99⅘; P. M., 99⅘.

March 5.—A. M., temperature 99⅘; P. M., 100.

March 6.—A. M., temperature 98½.

March 7.—Temperature 98½.



A.—Cavity of the uterus. B. B.—Ovaries. C. C.—Fallopian tubes.

March 8.—A slough which has been adhering to the bottom of the wound was loosened by gentle traction. It was found to be the portion of the cervix uteri which had been left below the clamp.

The external os, as will be seen by the figure, had retained its shape, though it was softened and flattened out. The tissue was of a yellowish-green color. A bi-manual examination per vaginam proved the existence of an opening from the abdominal wall down through the vagina. One finger passed into the wound met the other passed up through the vagina. A flexible catheter inserted and an excellent drainage established. From this time on, the patient improved rapidly. She ate and slept

well, and the wound soon closed. She suffered some pain from flatulent distension, but this soon ceased as the bowels became regular.

Upon examination the tumor proved to be a fibro-cyst. It was very irregular in its shape being covered with numerous nodules. It enclosed the uterus on all sides, and embraced a portion of the Fallopian tubes as is shown in the illustration.

The tumor weighed 5½ pounds; measuring at its longer diameter 18½ inches in circumference, and 16½ inches in the other.

This case is interesting for the reason that the removal of the tumor involved the ablation of the uterus and its appendages and the fact that the upper portion of the vagina was retained in the abdominal wound.

The cervix uteri came away through the abdominal wound on the 19th day after the operation. The advantage of using the clamp in this operation is manifest. It is a peculiarity of uterine tissue that it shrinks under strong pressure. When this occurs, the clamp can if necessary be tightened. In many cases the pedicle will be found reduced from two or three inches to half that diameter, or less. Experience proves that it is better to leave the clamp untouched for four or five days unless there is hemorrhage, and if properly secured, the less it is interfered with the better. It is now more than a year since the patient was operated on, and she has been in good health ever since.

CATARACT.*

BY EUGENE SMITH, M. D., PROF. OF OPHTHALMOLOGY AND OTOLOGY IN DETROIT COLLEGE OF MEDICINE.

Gentlemen.—The three cases of cataract which we propose to remove by operation today, taken with the highly instructive case of the last clinic, afford interesting typical cases for study. At our last clinic, you remember, we had to deal with a so-called Morgagnian cataract, the cortical layers of the lens being fluid while the nucleus remained hard. Today we have two senile—hard—cataracts, and one traumatic—soft. At the last lecture one of the class remarked that "hard cataract is senile, and soft cataract is juvenile." This is very good, in a general way, but I will show you a soft lenticular cataract in a man over sixty years of age. It is, of course traumatic, and it teaches you that traumatic cataract is *soft.*

Before operating for cataract we should always carefully examine the conjunctiva, the eyelids and the lachrymal passages, and correct any existing trouble. Note if the pupil reacts quickly to light, by shading the eye with the hand and removing it suddenly before a window. If the patient does not readily discern light from a window, place him in a dark room and light a candle or match some distance from him and note if he follows the movements of the light with his eyes; in this way you can judge if the retina is sensitive to light, if not, it were useless to operate.

Several questions arise in connection with the operation:

1. Should we wait till the cataract is mature—ripe—before operating? Experience teaches us that a lens comes out of the capsule more completely when the whole cortical substance is opaque, and there is less danger of iritis. If the cortex is not entirely cataractous, some is certain to be left behind, and as it swells on coming in contact with the aqueous humor, it is apt to excite iritis. Operators of considerable experience do not hesitate, however, to operate on immature cataracts by Græfe's modified linear method, particularly if the progress is slow and the patient unable to wait months or years for it to ripen. There is an artificial process of ripening cataracts of which I shall speak at some future time.

2. Should we operate on both eyes at the same sitting? Generally speaking, no. Very seldom do we have occasion to operate on the second eye if the first has been a success, most persons being satisfied with the sight of one eye. The reason for not operating on both is, if from inflammatory reaction the first operation has been unsuccessful its course may furnish us with valuable indications as to the second eye.

3. Should we operate on one eye whilst the other is still unaffected? If we are pretty sure of success, and the patient's business calls him into the crowded thoroughfares, yes. Notwithstanding the difference of vision of the two eyes, imperfect vision will enable the patient to discern and keep out of the way of vehicles on crossing streets.

This first case, Mrs. M., æt. 64, was under our care a year ago for extraction of a cataract from the left eye, and she now returns for operation on the right. The first was successful and being in robust health, we have every reason to believe this operation will also prove a success.

The cocaine solution (4 per cent.) having been instilled and the conjunctival sac washed out with a solution of bichloride of mercury—simply as an aseptic precaution—the speculum is introduced. Being a somewhat prominent eye fixation forceps are not necessary. While the patient looks slightly downwards, the knife with its cutting edge upwards is made to enter the anterior chamber about one millimeter from the corneal margin and about two millimeters below the tangent to its summit, directing the point towards the center of the

*Clinical Lecture, Oct. 12, 1883, at St. Mary's Hospital.

cornea until the point has passed the pupillary border farthest from the puncture, then the handle is lowered, the point raising till it is opposite the point of puncture, when the counter-puncture is made. The incision is then completed by a push and pull movement, a sort of sawing motion, the edge of the knife having been slightly tilted forward. As the knife cuts through the sclero-corneal margin—as you see it lifts the conjunctiva, and a greater or lesser flap may be made in finishing the incision. Lifting the anterior lip of the wound I drop a couple of drops of the cocaine solution on the iris. Make a small iridectomy, then with the cystotome scratch the anterior capsule through the center and at the periphery, and, making gentle pressure backwards and upwards with the rubber spoon on the lower portion of the cornea, you observe the lens escape. When cortical matter remains, gently coax it out by pressure, with the spoon or the eye-lids against the cornea. With a small spatula the iris is freed from the angles of the wound, the conjunctival flap is placed in position and the lids closed with a small pledget of absorbent cotton, an elastic bandage applied to both eyes and the patient allowed to sit up or lie down in a room *slightly darkened.*

I am in the habit of removing the bandage, washing the eyelids with cold or warm boracic acid solution every 24 hours, and applying a fresh dressing. I know this is looked upon by some as meddlesome and unnecessary, but it *does not* increase the danger and it affords much comfort to the patient. After 24 or 48 hours I commence the use of a 4-grain solution of atropinæ sulph.

This second case, Mrs. F., æt 69—differs in no particular from the last, except, the eye being deeply sunken in the orbit, fixation forceps are necessary. The various steps of the operation are carried out, as you observe, the same as in the previous case.

The third case, gentlemen, Mrs. B., æt. 62 received a blow on his right eye 3 months ago The eye was not wounded, but as a result of the blow the nutrition of the lens has been interfered with and opacity has taken place. The appearance is typical of soft cataract. You can see the pearl-like whiteness of the pupil for quite a distance. In the soft cataracts of "juveniles," children, many operators prefer to puncture the capsule with a cataract needle and break up the lens, the lens matter being absorbed by the aqueous humor. If this method is pursued a second or third operation is generally necessary, and weeks required for absorption. In adults, linear extraction is preferable. You see I make a linear incision through the cornea with a lance-shaped knife, and I boldly carry the point of the knife through the dilated pupil into the lens, tilting the knife and gently pressing on the eyeball with the fixation forceps you observe the soft jelly-like lens matter escaping. As it does not all escape, I introduce a curette into the wound, and you see the rest of it easily come out. The dressing is a pledget of cotton and a bandage over the operated eye, and the daily use of a 4-grain solution of sulphate of atropine.

You remember, gentlemen, that there are two broad divisions of cataract—hard and soft. You have, fortunately, to-day seen both, and their treatment—let us hope you will remember all about them.

Case 4.—MRS. G., æt. 62, illustrates the possible dangers of cataract operation. An uncomplicated, perfectly smooth operation for senile cataract was made some weeks ago, and was followed by commencing suppuration of the wound and suppurative iritis. The galvano-cautery checked the corneal trouble, but the iritis caused closure of the pupil, and I now propose to make what is called iridotomy, which is an incision in the iris. Passing a lance-shaped knife through the cornea as in linear incision, I pass the point through the iris; withdrawing the knife, I pass a pair of WECKER'S forcep-scissors closed through the wound, slightly open the blades, pass one blade behind the iris, the other in front, and closing them make a slit across the iris. The eye is dressed the same as the others.

Not every case of suppuration of the cornea terminates so happily, usually the cornea becomes necrosed and the eye is lost.

This next case, gentlemen, is one of strabismus, and as it does not differ from the one operated on at the last clinic I will not talk about it, but proceed to tenotomize the internal rectus.

SURGICAL NOTES—EMERGENCY HOSPITAL.

BY HAL C. WYMAN, M. D., M. S., PROF. PRINCIPLES OF SURGERY MICHIGAN COLLEGE OF MEDICINE AND SURGERY, DETROIT.

Case I.—Lithotomy—Oxalate of Lime Calculus.—The calculus which I exhibit was removed from the bladder of Mr. M., aged 54 years, by lateral lithotomy. It weighs 583 gr., is rough and hard, and oval, measures $1\frac{3}{4}$ inches in length, $1\frac{1}{2}$ inches in width and $\frac{7}{8}$ inch in thickness. It has a dark brown color, and is particularly rough on a part of its surface where it was enveloped and encysted in the bladder walls.

The patient is a large, well-built man, who weighed 240 pounds the day the operation was performed. He is quite fleshy. He had gonorrhœa sundry times in his earlier years. His urine began to trouble him by being difficult of evacuation, about four years ago. It was never bloody but once, and that was years ago,

after he had recovered from a gonorrhœa. During the last four years the principal symptoms of calculus have been pain in region of bladder and sudden interruption of flow of urine. There has been no pus or alkalinity or ammoniacal smell of urine to disturb him. The operation was performed last Sunday in the hospital. The patient was anæsthetized with chloroform. His perineum was so deep that a very long staff had to be used to divide it. After reaching the bladder no little difficulty was had in dislodging the stone by means of bi-manual pressure and manipulation of the forceps in the bladder, so completely was it encysted. The stone was carefully drawn through the dilated wound in the bladder, no great force being necessary. Since the operation there has been no rise of temperature above 100°. Urine now comes through the urethra in part. The treatment consisted of careful drainage of the bladder for three days by means of a large, soft rubber tube, one-half inch in diameter, placed in the wound. Through this all clots was carefully washed away, and an additional safeguard against infiltration of urine established.

Now, fourteen days after the operation, the patient is doing well. The urine still discharges slightly through the wound—a part being voided *per vias naturales*. The after treatment of these cases is very important and must never be left to an inexperienced nurse. All urine must be sponged up as it escapes from the wound so that there may be no erythema or inflammation of the skin of back or buttocks to annoy and disturb the patient.

Case II.—Perineal Cystotomy.—This young man has had inflammation of the bladder for the last two years. He claims to have had no venereal disease. He found trouble in passing a good full stream of urine, and had to make frequent efforts when his health first began to fail. He relates that his physician examined him and diagnosed stricture of .the urethra. He had great trouble in using a sound to get by the stricture, but finally large instruments were passed. Later his symptoms grew worse. He had to pass his water with increased difficulty and frequency. Pus and mucus appeared in large quantities in the urine. Then another physician saw him and thought best to make internal urethrotomy—that is to cut the stricture from the urethra by means of a knife concealed in a proper instrument. That procedure did him no good, he says. His pains increased and his inability to retain his urine increased. He was in the hospital here ten days, during which time we tried restricted diet. Examined his urine and noted the presence of pus and phosphates. He continued, in spite of our treatment with anodynes, to pass his urine every half-hour, day and night, emaciating rapidly.

To cure him I shall perform a perineal cystotomy. That means a cut through the neck of the bladder, dividing the perineum. It will thoroughly drain the inflamed bladder giving the rest by keeping the urine out of it.

Now we give the patient chloroform. As he goes under its influence we draw his perineum to the edge of the table, flex his legs upon his thighs and have them securely held in the lithotomy position by assistants. I now introduce the index finger of my left hand in to the rectum and explore the prostate and deep urethra. Our assistant introduces the lithotomy staff and holds it up snug against the triangular ligament so as to keep the urethra and prostate away from the rectum; we can feel the staff from the rectum and ascertain when we want to strike it with the knife. Now I select a point in the center of the perineum midway between the tuberosities of the ischia and the base of the scrotum and the anus, then I introduce the point of the long sharp knife and carry it forward until I pierce the urethra at the apex of the prostate and then carry the knife forward in the groove of the staff until it enters the bladder, then withdrawing it I curve the incision downward through the integuments to the verge of the anus. With the staff still in position I introduce my finger through the wound into the bladder and carefully explore that organ. The urine in the bladder has in the meantime escaped and by pushing with one hand over the lower part of the abdomen I can feel every part of the interior of the bladder. If there is any stone or tumor-papiloma present, I can feel it. But I find nothing but the smooth outerly walls of the inflamed bladder. We will now introduce the large one-half inch drainage tube and allow the urine to drain away for the next ten days. Then we will withdraw the tube and let the perineal wound heal and expect our patient to get well.

NOTE.—Three weeks after the operation the perineal wound had closed and the patient felt himself well.

SUMMARY.—*Lithotomy.*—Large oxalate of lime calculus, encysted so that it could not be treated by litholapaxy. Thorough drainage of bladder and wound through large tube for first few days after operation a means of preventing infiltration of urine and constitutional infection.

Perineal Cystotomy.—Drainage by tube insures rest for the bladder and diminishes of the operation. Easy to explore every part of bladder if bimanual touch is employed.

REDUCTION OF STRANGULATED INGUINAL HERNIA BY TAXIS AND RECTAL INJECTIONS.

BY W. H. CLOUSE, M. D., CRESTLINE, OHIO.

Some weeks ago I was summoned to see Mrs. N., who had been suffering much pain for sev-

eral hours from a strangulated inguinal hernia. She stated that she had tried to put it back for some time (as she had often done before), but could not succeed this time. I gave her a hypodermic of morphine and then used injections. I found the tumor very large and hard, and as the injection failed, I thought the conditions would not warrant another attempt at taxis. I, therefore, applied ice in flannel over the tumor, and waited for the parts to relax, giving a little stimulant, as it seemed to be indicated. The tumor soon diminished in size and became much softer. I then placed the patient in a hot hip bath for 20 minutes, after which she was placed in bed and taxis used. But still I was not able to reduce the tumor.

I now thought that by using an injection, and at the same time resorting to taxis, I might be able to succeed, as the injection would tend to carry the bowel up, and also to draw on the flimsy portion I was endeavoring to poke back. I at once put my theory into action, and had the gratification of reducing the tumor in about two minutes.

My first experience with the use of ice applications in strangulated hernia was Aug. 15th, 1887. I was called to the bedside of Mr. M., who was suffering greatly and had been vomiting a great deal. I gave him a hypodermic of morphine at once and then used injections and hot bath, followed by taxis. All of these having failed, I then told him that he would have to be operated upon to save his life, and after having carefully explained the procedure to him, he, to my great astonishment, refused to have his life saved in this manner. I, therefore, had to think of something else to do. I ordered some ice, and applied an ice bag over the tumor, which was very large and hard. The ice was renewed as it became necessary. I flexed the limbs well and gave morphine and stimulants to support the system. I called on patient in the morning and found him all right. The hernia had gone back during the night.

I think the above methods will save more lives than the frequent use of the knife does, even when carefully used.

Correspondence.

BASEDOW'S DISEASE—VOMITUS HYSTERICUS.

The following remarkable facts concerning Basedow's Disease or Exophthalmic Goitre, occurred in the practice of PROF. STILLER, of Budapest, and were intended for presentation at the Congress of Internal Medicine, but the professor being prevented by circumstances from attending, they were published in one of the Vienna medical journals. Had they come from any lesser authority they might be received with incredulity, but as it is, their clinical value and great medical interest must be acknowledged. The first case cited, was that of an extremely nervous woman, the mother of nine children who had suffered for eighteen years with Basedow's disease. Both hypertrophy and dilatation of the heart were present, together with mitral insufficiency indicated by a systolic murmur. All the various remedies had been tried on this patient with very little result, indeed she grew worse instead of better. She was finally sent as an experiment into the mountains, to a place situated some three thousand feet above the sea-level. Much to the professor's surprise she became very much improved; her pulse had dropped from 120 beats per minute, to 72 beats, the protruding eyeballs became normal and the thyroid tumor almost completely disappeared. This continued during her stay in the mountains, but in the valley and among her household cares, the former bad symptoms returned again.

This state of affairs lasted for 2 years, the patient going in summer to the mountains where she was always better, but losing ground again during the long hard winter spent at home. The next two summers she passed for reasons of her own, in a place much less elevated than the former one and obtained very little benefit therefrom. Finally her disease took on a more severe form and she came into an extremely critical condition. The cardiac dilatation became greatly increased, there was complete anasarca of the lower limbs, as well as effusions into all the serous cavities, including the pericardium.

Apparently the patient was in the final stage of organic heart disease and had but little longer to live. Digitalis was given, but without benefit. When the husband was told that there was no further hope for his wife, he was utterly desperate and declared that one last effort must be made to save her, no matter what. It was therefore suggested to send her to the original mountain resort where she had first obtained so much benefit, the husband being plainly told, however, that she might die on the way. With great difficulty the patient way brought to the railroad, where a bed was prepared for her in one of the cars and she was thus carried, hardly alive, to her destination. Incredible as it may seem, she returned in two months time, entirely free from circulatory disturbances, the effusions all reabsorbed, and looking almost like a well woman. It is now two years since this occurred, the patient has since pulled through an attack of apoplexy, and still lives to enjoy fair health.

The second case is very similar to the first, being that of a highly neurasthenic woman, suffering from acute Basedow's disease, which had gone on to enormous dilatation of the

heart with anasarca, ascites and the usual picture of advanced circulatory disturbance.

Rest in bed, digitalis, etc., had but a fleeting effect and the condition became steadily worse. Pulsation could be made out over the jugular vein as well as over the liver, and both the mitral and tricuspid valves were insufficient. This patient was sent to the same mountain resort as the former, to spend the winter, and came back in the spring after a six months' stay, blooming with health and looking ten years younger, to use the author's own words. The only trace of disease left was a moderate dilatation of the heart. Since this time the patient has been free from circulatory disturbances and apparently in better health than she ever was before.

The author himself attempts no explanation of these remarkable facts, but simply states them in the hope that it may induce others to continue the investigation and finally throw some light on the matter. What is peculiar in the matter is that conditions of circulatory disturbance depending upon heart disease, are universally supposed to be made worse by the rarefied air of high altitudes. The fact that these cases were so remarkably benefited by their stay in the mountains, is a strong argument in favor of the assumption that Basedow's disease, though presenting a complete picture of organic heart trouble, is really dependent upon a derangement of the nervous system. In my own case, the clinical fact discovered by the professor that this formidable disease is so greatly benefited by high altitudes, is of no small interest to the medical profession in general.

A novel method of treating obstinate vomiting has lately been successfully employed in one of the large Italian clinics, and the result published in the medical journals. The patient, a young girl twenty years old, had always been of an extremely nervous disposition and had for some time been afflicted with genuine vomitus hystericus. Injections of morphine and cocaine as well as numerous other remedies were tried, without effect, and the condition of the patient became steadily worse, as almost everything taken into the stomach was again rejected, and she was emaciated to a skeleton. Rectal alimentation was now tried, but the bowel was so intolerant that it was shortly abandoned. As a last resort, forcible feeding by means of the stomach pump was attempted and with complete success.

The preparation used for the purpose was made up as follows: To one liter of meat broth was added four eggs, well beaten up, 40 grammes of peptone, 100 grammes of marsala wine and a few grammes of salt. Of this mixture about half a liter was introduced, the first day by means of the stomach pump, and the quantity gradually increased until two liters were given in a day. Before this amount was reached the vomiting had stopped entirely. She then began to take milk, at first only a little and then more and more, the amount of nourishment introduced by the pump being decreased in proportion. To the milk was soon added more solid food and then the two processes went along in inverted ratio, the amount given by the stomach-pump decreasing as that taken in the natural manner increased, until finally the pump was discarded altogether, and the patient was cured.

This treatment has not yet been tried in obstinate vomiting of pregnancy, but it certainly would be worth the effort, and good results might well be expected from it.

W. F. ROBINSON, M. D.

DRESDEN, SAXONY.

THE TREATMENT OF ANÆMIA.

While I feel thankful to DR. CRAMER for dealing so gently with me, I also feel like making a few more remarks on the subject, by way of being more explicit:

(1) If the druggists are liable to swindle us, let us not increase the evil by encouraging the pharmacists to produce all kinds of ready-made medicinal compounds.

(2) Concerning iron, I was an unbeliever before I graduated, for I always thought the theory to be founded on false reasoning. I have always thought that the fact of a trace of iron being found in the blood, was no reason why we should give it in all cases of anæmia. If this were the case, what would become of all the savages, the lower animals, and all the bulls in Basham? We are all taking iron with our food all the time, and we cannot avoid it. The fact that iron is found in the fæces at all times, goes to show that nature always produces more iron than we require in the system.

Although I have always endeavored to be a student and constant reader, I was not in the race after bacteria. We have septic matter and poisonous germs and we also have antiseptics and germicides; to ignore these, would be like ignoring the brick-houses and the stone-walls. I have seen a large number of clinical cases during a period of about twenty years and I have also seen a great many cases of anæmia disappear very rapidly without the use of iron. Then have we not, at least, a right to believe that iron is not so important as it was formerly supposed to be in the treatment of disease?

Concerning chlorosis: according to my experience, the trouble is not at the beginning of menstruation, but generally after menstruation has been established for some time. Woman has her mission and after she has arrived at maturity, she may find herself growing like unto a barren fig-tree. This is perverted nature and dis-

appointment, which produces nervous depression and functional derangement, and then the other symptoms follow: dyspepsia, constipation, fecal poisoning and chlorosis.

Respecting the menopause, here is where you have your deranged adjustments. Nature gradually accommodates herself to the change, in some cases with little or no inconvenience, in others, with serious and sometimes fatal results. Of course, my remarks consist principally of suggestive reasoning, for verily the practice of medicine is founded on a structure of sand. How often we imagine our diagnosis and treatment to be correct, when the patients die and all our theories fizzle out most beautifully!

G. A. WILLIAMS, M. D.

Bay City Mich.

DRUGGISTS VS. PHYSICIANS.

The communication on this subject by X. Y. Z. in the AGE of 25th ultimo, loses little of its force from the fact that it is anonymous. The evil which the writer touches up is perennial. All concede it be an abuse which should not be tolerated, and yet it goes on striking its roots deeper and deeper into the medical body from which it withdraws nutriment and strength. Druggists are useful in their sphere, but that sphere they have long since outgrown, and they are now disputing, inch by inch, the legitimate domain of the physician. Originally the assistants of physicians, they have outgrown this function and have usurped the prerogatives of the practitioners of medicine. I will lay a wager that I can secure from over 90 per cent. of the druggists of any city, an extemporaneous mixture for any disease from gonorrhœa or a "slight cold" to typhoid fever. Describe your symptoms or those of your "friend" and quick comes the invariable response "I will make you up a little something," and suiting the action to the word your accommodating druggist will either dispense the prescription of some physician or will aimlessly make a trip through among his shelves, taking "here a little and there a little" until he has filled his phial. There is a drug-store on every corner, and every presiding genius considers himself competent to prescribe over his counter for every one who is able to walk into his store. When I began practice about twenty years ago, transient cases, as of gonorrhœa, syphilis, etc, were my dependence for nearly two years. It was a poor week when I did not collect from twenty to thirty dollars out of this class of practice. Now I don't see a case of this kind once a month. I do not think that this argues any improvement in the morals of the newer generation. The druggist now catches the acute cases and physicians get only those whom he has failed to relieve. Formerly the druggist presented the merits of some patent medicine in the cases on which he was consulted. Now, however, he has learned to compound his own mixture and gets a dollar for the pint bottle of it which costs him less than a quarter.

What are we going to do about it? I don't know, unless it be to adopt X. Y. Z.'s suggestion, and dispense our own medicines. Our manufacturing pharmacists have made it very easy for us to do this if we so elect. The long list of formulæ which they prepare in such elegant shapes and the pills of active principles of drugs which they make, enable us to dispense the medicine almost as readily as we can write the prescription for it. This is one way. Another way is for us to withdraw our patronage from the counter-prescriber. Which is the best? I think the former, and I am becoming stronger every year in my resolve to resort to it.

U. V. W.

PTOMAINES AND LEUCOMAINES, OR THE PUTREFACTIVE AND PHYSIOLOGICAL ALKALOIDS. By Victor C. Vaughan, Ph. D., Professor of Hygiene and Physiological Chemistry in the University of Michigan, and Director of the Hygienic Laboratory; and Frederick G. Novy, M. S., Instructor in Hygiene and Physiological Chemistry in the University of Michigan.

Philadelphia: Lea Brothers & Co.
Detroit: John MacFarlane.

This little volume is devoted to a consideration of the alkaloids which result from putrefactive changes and of which so much has been heard of late years. The authors have endeavored to trace the relations of cause and effect between these and a number of diseases. They give also a history of what has been done by their prececessors in the same line of work, and draw liberally on what has long been established in physiology. They have also made numerous and original experiments of their own, and have succeeded in producing a work which will be read with interest, if not with profit, from a practical standpoint. DR. VAUGHAN'S discovery of tyrotoxicon and the alleged agency of the substance in causing intestinal disorders, are already familiar to the profession. The subject is, however, gone over again in the book before us, and is elaborated more than has been done in any of the contributions to the periodical literature. The bibliography of the work shows great diligence and a thorough familiarity with the labors of the co-workers of the authors in this same field. The book is thus one which may be unreservedly commended to those who desire light along the line of this comparatively new study.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., OCT. 25, 1888.

Editorial.

SIR MORELL MACKENZIE AND THE GERMANS.

The controversy which has grown out of the treatment of the late Emperor Frederick, and which is being waged between his medical attendants, as principals, is one of the most humiliating which has disgraced the profession of this generation. The bitterness of doctors' quarrels is proverbial, but that which is now going on under the fierce light which beats upon the throne transcends, for malignity, all previous quarrels. It has assumed a distinctive international character and unless the common sense of which it is hoped the contestants are not entirely bereft, asserts itself before long, the complication which may arise may be serious. The Germans are egged on through the well-known, deep-rooted hatred of the young Emperor for the English profession. This impulsive young man doubtless encourages the controversy in the hope of the discomfiture of the English surgeon. There could be no serious objection to the post-mortem discussion of the unfortunate case, but when it comes to develop threats of personal violence and duels between those who were engaged in the case, it is high time to call a halt. The rank and file have a right to look for more courtesy and Christian charity among the leaders, and failing in their expectations their disgust antidotes all scientific interest

A *resumé* of this interesting case may not be out of place, revealing as it does in the manner in which it was handled, the same finiteness of human wisdom and professional competence of which the common, every-day experience of less distinguished practitioners with less distinguished patients, furnishes illustrations which are but too frequent. SIR MORELL MACKENZIE, whose fame as a laryngologist had long been world wide, was summoned in May, of last year to see the Crown Prince Frederick. He properly refused to interfere in the case without the consent and presence of the gentlemen who were in attendance. The consultation revealed a growth on the left vocal chord of about the size and shape of a split pea, which DR. GERHARDT had attempted to remove by means of the galvano-cautery. The only inconvenience which the Crown Prince had suffered up to this time was from loss of voice, there being no pain, difficulty of breathing or other disturbance. The question of the nature of the growth was a natural one, but it was from it that the dissension between the attendants grew. The Germans held that it was malignant and advised an external laryngeal excision. To this MACKENZIE objected, holding that the growth was benign, or, at least, that there was nothing in its appearance or nature which warranted the diagnosis of malignancy. At his suggestion a small portion of it was removed and submitted to VIRCHOW for examination, the result of which should decide whether or not the excision should be made. VIRCHOW'S microscopic examination supported MACKENZIE'S position, and here it was that the trouble began. MACZENZIE had made the operation for removing the section for examination, and the others maintained that he had not removed it from the growth, but from adjacent parts. The patient, however, sided with the Englishman who from that time assumed charge of the case, in which he was continued until the autopsy. For a time all went well and the Crown Prince was felicitated on his escape from an operation so grave in its nature as that which had been proposed. Soon, however, a change for the worse set in, and it was found necessary to perform tracheotomy and to insert the tube. Now it was that the suppressed jealousy and hatred of the English interloper began to find expression, and no man was ever so beset as he in charge of a case of such grave responsibility. The medical journals, the medical men, the secular press, the court and the people united in decrying him. In the midst of it all MACKENZIE stood single-handed and alone, supported only by the confidence of his patient himself and his Royal wife, an instance of dignified heroism and devotion to duty, as he conceived it, which inspires us with profound respect for the man. In the meantime the Emperor died and the Crown Prince was called to the throne which he occupied for several months, his disease growing steadily worse until it finally resulted in death. The autopsy was held, and the disease was found to be cancer, as the German attendants had maintained.

Following the interment of the Emperor, the vials of German wrath were once more poured out on the devoted head of the "Englisher," who had up to this time opened not his mouth. He now found himself at liberty to speak, and announced that his replies would take the form of a book, which he was engaged in preparing. The book has now been given from the press, and although the circulation and sale have

been suppressed in Germany, it is now before the profession. This book tells such a story of jealousy, intrigue, envy, chicanery and professional incompetence as seems well nigh incredible.

DR. MACKENZIE has been very ingenuous in his statements, which bear the impress of honesty and truth, and the impartial reader will rise from its perusal with an exalted opinion of its writer, both as a man and as a physician.

The question will naturally be asked how we can reconcile this opinion with the outcome of the case, which shows so clearly that MACKENZIE'S original diagnosis was erroneous. It will be remembered that following his first statement that the growth presented none of the characteristics of malignancy, MACKENZIE was silent. He says in his book that immediately prior to his seeing the case, the growth had for twelve successive days been burnt with the galvano-cautery, and that it was this treatment which developed the malignancy. The opinion of VIRCHOW, taken in connection with the known fact that persistent irritation of a benign growth may develope malignancy, is strongly corroborative of his diagnosis. But, admitting that the diagnosis was erroneous, it was better for the patient that he was taken out of the hands of those who, having tortured him with the galvano-cautery, next proposed to extirpate his larynx. FREDERICK was doomed in any case, and the humane treatment which he received at the hands of MACKENZIE was much to be preferred to that to which he had been obliged to submit. Extirpation of the larynx may be a brilliant surgical operation, but in no case in which it has been performed has the patient lived as long as FREDERICK did after the German surgeons were denied the distinction of making the operation on him. Had the operation been performed, the patient would either have died under the knife or have survived but a few weeks at the furthest, and the procedure would have been universally condemned as unwarranted.

But why, after he had become satisfied of the cancerous nature of the disease, did not MACKENZIE come out and acknowledge his error? In the first place his diagnosis, like that of VIRCHOW, was not positive of benignancy but negative of malignancy, and in the second place he preserved his professional dignity by not rushing into the press, after the manner of the Germans, and revealing the secrets of the sick-chamber. His duty was to his patient and he attended assiduously and intelligently to the end. If, as has been intimated, he refrained from publishing the malignancy of the disease for state reasons, who will blame him? The only thing in connection with the whole case, for which he is censurable is the show of temper which he displays in his book, but he is human and the provocation which he had was very great.

IS PUERPERAL FEVER A PREVENTABLE DISEASE?

Forty-five years ago DR. OLIVER WENDELL HOLMES, as eloquent then as at any period of his life, declared that "the woman about to become a mother, or with her new-born infant upon her bosom, should be the object of trembling care and sympathy wherever she bears her tender burden, or stretches her aching limbs. The very outcast of the streets has pity upon her sister in degradation when the seal of promised maternity is impressed upon her. The remorseless vengeance of the law, brought down upon its victim by a machinery as sure as destiny, is arrested in its fall at a at a word which reveals her transient claim for mercy. The solemn prayer of the liturgy singles out her sorrows from the multiplied trials of life, to plead for her in the hour of peril. God forbid that any member of the profession to whom she trusts her life, doubly precious at that eventful period, should hazard it negligently, unadvisedly or selfishly." These are words which should be burnt deep into the minds of all who undertake to attend women during parturition. They, moreover, prompt again the query whether the one disease which is the most frequent and fatal complication of parturition, can be prevented. The advances which have of late years been made in antisepsis well nigh justify an affirmative answer. This being the case it would seem that the conclusion of DR. MATTHEWS DUNCAN that "not fewer than 1 in every 120 women, delivered at or near the full time, die within the four weeks of child bed," should no longer stand as the approbrium of medicine.

As pointed out in a recent address by by DR. CULLINGWORTH, Obstetric Physician to St. Thomas' Hospital, London, the old idea of puerperal fever was that it was sometimes the result of infection from without (heterogenesis), and sometimes of infection from within (autogenesis). There is now abundant evidence to show that the disease is always due to the introduction of pathogenic micro-organisms from without. These micro-organisms may either be varieties of septic bacteria or the common bacteria of putrefaction. The *modus operandi* differs in the two cases. The septic bacteria, finding an entrance through some wounded surface in the genital tract, make their way into the blood and tissues of the patient, and, multiplying there, become the active cause of the disease. The common bacteria of putrefaction also enter the genital tract from without, but their influence is exerted, not by becoming absorbed and distributed in the blood

and tissues, but by setting up the process of putrefaction in any *debris*, whether of placenta, membrane, or blood-clot, that happens to be retained in the uterus or vagina. Such *debris* may be present, and may be the cause of hemorrhage; but, unless bacteria obtain access to them, they will not undergo putrefaction, the presence of bacteria being essential to that process. When they do obtain access and putrefaction is set up, certain poisonous chemical products are given off, which, if absorbed into the system, are capable of giving rise to puerperal fever.

The great difference between puerperal fever caused by septic bacteria and that caused by putrefaction is, that whereas in the former there is a living, self-multiplying poison in the system which, once introduced, must run its course, there being no antidote as yet known to us except such as would at the same time destroy the life of the patient, in the latter the poison, though capable, if left to itself, of producing deadly results, is, if the source of the poison be removed and its absorption arrested, quickly eliminated from the system, with entire relief to the dangerous symptoms.

Fortunately the same means that prevent the one form of puerperal fever prevent the other, what is required in both cases being that no micro-organisms shall be allowed entrance to the genital tract either during or immediately after the process of parturition.

It is not possible, so far as I know, absolutely to distinguish at the bedside that form of puerperal fever caused by septic micro-organisms from that caused by the products of putrefaction. The rule of treatment, therefore, when symptoms of puerperal fever show themselves, is, first of all, to make sure that the uterus and vagina are perfectly empty and clean. If the case be one of putrid intoxication (sapræmia, as DR. MATTHEWS DUNCAN calls it) the symptoms, after the cleansing out of these two cavities, will at once subside; if not, no harm will have been done.

The circumstance that the retention of *débris* in the genital passages is an essential factor in the production of puerperal fever due to putrid intoxication has led to this form of disease being described as autogenic. Nothing could be more misleading. "To admit," says FRITSCH, "the existence of a spontaneous infection is to take a long step backward." Not only so, it is to paralyze effort and destroy hope. "The doctrine of autogenesis," exclaims PARVIN, "is a confession of ignorance, the creed of fatalism, the cry of dispair.....the very pessimism of obstetric medicine"?

The success which has attended antiseptic precautions in certain lying-in hospitals, in the prevention of puerperal infection certainly warrants the extension of the methods employed to private practice, and particularly is this so in view of the fact that these methods are exceedingly simple and involve no considerable trouble. A pint of corrosive sublimate solution (1:1000) constitutes the essential of the prophylactic treatment. The accoucheur should carry with him a few 8-grain corrosive sublimate powders one of which dissolved in a pint of water gives a solution of the proper strength. In St. Thomas's Hospital the powder employed contains 50 grains of tartaric acid and one grain of cochineal. The tartaric acid both increases the bulk of the powder and lessens the risk of a portion of the mercury being lost by precipitation, either from being formed into an insoluble albuminate or from the alkalinity of the water. The hands should be carefully washed in this solution and the nails cleansed with a brush. The irrigation of the vagina with the solution as a preliminary procedure involves little additional trouble.

It is true practitioners have gone through life and have attended many hundreds of women in labor, without ever having had puerperal fever develop and that, too, without having taken any special precautions. This only argues that they have been exceedingly fortunate. Others not less careful or competent have lost numerous cases from this cause—cases, too, which have developed *de novo* and without the slightest grounds for suspecting that the germ has been carried to the woman by the accoucheur. It is not the part of wisdom or prudence to bank indefinitely on one's luck, and when the means of preventing to an almost absolute certainty the occurrence of so deadly a disease as puerperal fever are so easily applied, one is scarcely to be held blameless when he neglects to employ them as a regular routine in practice.

Book Notices.

PHYSICIAN'S INTERPRETER IN FOUR LANGUAGES, Specially Arranged for Diagnosis. By M. von V.
Philadelphia: F. A. Davis, 1231 Filbert Street.

With this neat little book on his knee the practitioner can ply questions in English, French, German and Italian. This is very convenient when he is not a polyglot. Unfortunately, though, the patient is not supplied with a book of answers which fit the questions and at the same time describe his sensations, and he is confined to monosyllabic answers. For instance, you desire to know of the German whether he passes his urine involuntarily and you turn to the book and find the equivalent: Lassen Sie Wasser ohne es zu wollen? and the patient can reply only *ja* or *nein*. He cannot enter into any description of the enuresis, the dysuria or the polyuria which may be his chief trouble. When he replies "Ich kann mein Wasser gar nicht lassen," or "Es thut mir sehr weh wenn ich Wasser lass," there is no equivalent in the book for the answer and the conversation becomes rather wearisome, and the stricture or the clap from which he is suffering goes undetected. The book is, however, as good an effort as can be made in a direction which promises such poverty of results.

Medical Progress.

INJECTIONS OF OSMIC ACID IN MUSCULAR RHEUMATISM.—In No. 24 of the Russkaya Meditsina, 1886, I published some cases of muscular rheumatism in which I had employed osmic acid in the form of hypodermic injections. These cases, though not very numerous, were tolerably characteristic, and bore out the suggestion first made, I believe, by myself, as to the advantages of a persevering use of this method of treatment.

At the commencement I employed osmic acid in quantities of from three to six drops of a one per-cent. solution for a single injection—the same doses, in fact, in which it is recommended in cases of neuralgia. At the present time the doses given internally are from one-sixtieth to a quarter of a grain per diem, and the hypodermic doses should therefore be about half as great. A very important case, however, that has occurred in my practice proves that these doses may with great advantage be increased. The case was that of a patient named Vikulin, belonging to the town of Maïkop, a merchant, thirty-three years of age, tall, of good constitution and well nourished, who for the last two years had suffered from severe pains in the dorso-lumbar region, especially on the right side, extending to the lower extremities and being most felt in the right leg. These pains seemed to have their seat in the lumbar muscles; they were much increased by local pressure of the finger, as also during changes in the weather. The pain was so considerable at night that the patient scarcely got any sleep. No morbid physical signs could be made out either in the lumbar region or in the legs. For about two years the patient had suffered from difficult and painful digestion, due apparently to acid dyspepsia. The tongue was coated; the patient sometimes had a desire for food, but as a rule he ate little, because even after a scanty meal he had pain and tenderness in the region of the stomach which were increased by pressure; the bowels were confined; besides, he frequently had palpitation, due, as it seemed, to derangement of the digestive functions, the size and sounds of the heart being normal, and the palpitation coming on during or soon after a meal. The kidneys acted normally. During his two years' illness the patient had frequently had medical advice, but had derived but little benefit from it. When Mr. Vikulin first came to me for advice last winter, complaining of lumbar pain, I gave him an injection of a Pravaz syringeful (about twenty-five minims) of a five per cent. solution of salicylate of cocaine in the lumbar region each day for three successive days. These injections were given in the morning, and for some hours afterwards the pain was much less, but at night it returned in all its old intensity, giving him no rest and being especially severe when he turned round in bed. I then determined to administer a fourth and final injection of the salicylate of cocaine, but by mistake injected instead a whole syringeful of a one per cent. solution of osmic acid, equivalent to about a quarter of a grain of the pure acid. Immediately afterwards the patient felt a severe burning pain in the lumbar region, and as this did not diminish in the course of twenty minutes while the man was lying on his face, I sent him home, without of course revealing my mistake to him, and told him to go to bed and apply cold compresses to the loins. I was much alarmed by the thought of the chances of phlegmonous inflammation or even sloughing, considering the large dose of osmic acid I had given. I was consequently much gratified by the patient appearing the next day with a cheerful expression and the intelligence that he had the first good night's sleep for two years, being able even to turn round in bed without pain. He said that the burning pain had only lasted for about two hours, and then had completely disappeared, so that he had not gone to bed or applied cold compresses as I had directed. On examination I found the skin very red around the puncture over an area the size of a florin, but with no appearance of swelling. After the patient went home I prescribed for his indigestion two grains of Finkler's papain with six of milk sugar, as a powder an hour after meals, to be followed by a tablespoonful of a mixture containing bicarbonate of sodium, aromatic spirit of ammonia, carbolic acid and glycerin.

When the patient came to me the next time, some three months later, he reported that the pains in the loins and in the lower extremities had been less, and that his nights had been but rarely much disturbed. Upon examination I found that there was still a good deal of tenderness on pressure in the lumbar region. His digestion was perfectly normal, his appetite good, and there was no pain over the region of the stomach after meals; the bowels too were no longer confined. I administered three injections into the parenchyma of the lumbar muscles, of from one to fifteen drops of a one per cent. solution of osmic acid on three successive days. At the present time, according to the account given by the patient when I saw him several months afterwards, the pain in the loins and in the legs have completely disappeared and he is able to walk easily and to sleep well.

The case has a scientific and practical interest, showing as it does that a whole Pravaz syringeful of a one per cent. solution of osmic acid may be injected into the muscular tissue without giving rise to serious consequences either of a local or a general character. At the present time I give in muscular rheumatism an injection, into the parenchyma of the muscle, of eight drops of a one per cent. solution of osmic acid and gradually increase the dose up to a syringeful, having regard to the different susceptibilities evinced by different persons, especially women, to this remedy. Large doses of osmic acid have two advantages over small ones. First, fewer injections are needed, and consequently there are fewer punctures, and it is these that set up the burning pain which constitutes the main objection to this mode of treatment, and secondly, large doses act more promptly and with greater certainty. These injections I administer both in chronic and in acute rheumatism without employing any other external or internal remedy. I have not had a single case either in private or in hospital practice where this treatment has not produced a considerable improvement, and in the great majority of cases complete recovery has taken place after two injections, in rare instances as many as six being required. I have

not seen any cases where the affection has returned.

Let me now say a word or two about the action of papaïn, which proved so successful in the above mentioned case. In all cases of indigestion, in dyspepsia and in chronic cases associated with acid eructations with painful gastric fermentation, I order—when the patient is well enough off to afford an expensive drug—Finkler's papaïn is not less than two-grain doses with milk sugar one or two hours after meals. I direct these powders to be taken in a spoonful of the alkaline mixture mentioned before. This has a good effect on the pain occasioned by acid fermentation while chymification is going on, by neutralising the acid as it is formed. For this condition papaïn is unrivalled as a remedy; it causes hard food to be digested, and the fibrous tissue of meat and vegetables is dissolved by its means. I have by this method of treatment completely cured some long standing cases of dyspepsia of the most obstinate description associated with gastric pain and with constipation. Of course I at the same time took care to attend to the general habits, and especially the food, of the patients. The way in which Mr. Vikulin's case yielded to papaïn appears to be very characteristic.—Dr. Grinevisky, Rostoff on the Don, in *Practitioner*, Sept. '88.

Value of the Hypophosphites in the Treatment of Phthisis Pulmonalis, Tuberculosis, Scrofula, Etc.—Phthisis (tuberculosis) is a constitutional disease, in which tissue-nutrition is seriously impaired or arrested. The processes of assimilation and nutrition are first involved and interfered with; hence there is a slow and gradual, yet progessive, wasting of the fleshy parts of the body, which generally results in great emaciation, so characteristic of this disease. There is also a tendency, from defective tissue nutrition, to the formation of a lowly tissue growth—a growth or development of tissue *below* normal or healthy tissue. In the lungs this proliferation of *lowly* connective tissue-corpuscles produces a lymphoid mass, which does not develop into *higher* tissue, and there is a tendency to *molecular death* by necrosis; softening commences, and generally ends in suppuration. If this softening process goes on in the lungs, leading to ulceration and suppuration, then we have expectoration of purulent matter, indicative of corresponding destruction of lung tissue, with the formation of a cavity. During this period of softening and ulceration, and breaking down of the tubercular mass, there is great constitutional disturbance, as shown by the irritative cough, varying temperature (the evening exacerbation being very decided and profound), impairment of appetite, loss of strength, irritable temper, gradual emaciation, and hectic flush or fever. This is indeed a critical period. *Invigorating tonics* and nutritious food are *imperatively* called for, with healthful, moderate daily out-door exercise, in pure, dry air, and (in cold weather), light yet warm clothing.

Now, the cardinal point—the *important matter*—to be kept in mind is the improvement of the tissue nutrition. If the tubercular mass or masses soften, break down, and are expectorated in the form of purulent matter, then the general system gradually fails; or if in the formation of these abscesses and cavities, a large blood-vessel should be opened, then a sudden and excessive hemorrhage may rapidly precipitate and hasten the end. But if the appetite can be improved, if the digestion and assimilation are promoted, if the *tissue nutrition* can by any means be raised, then the neoplasm may be saved from a degenerate and downward course of destruction and death. If we can improve the neighboring lung-tissue, we may at least be able to set up a barrier around the tubercular mass. Little influence can be exercised or exerted directly on the tubercles themselves, as they possess no vascular system, although absorption of their organic elements is claimed by some to be a demonstrated fact. By a general improvement in the nutrition of the body, the danger of the *molecular* death of the new formation or growth is more certainly *limited*. We must ever keep in mind the lowered tissue nutrition, and avail ourselves of all the means at our command of raising it.

Now alimentation is essential, and must be secured if possible. Without appetite, sufficient food cannot be taken. The properly combined *hypophosphites* have long been recognized as valuable agents in supplying what is lacking. In short, they form a truly chemical food. Good digestion and perfect assimilation form healthy blood; and healthy blood is the essential prerequisite to proper histological nutrition. "In the blood is the life." The blood is truly liquid nerve and muscle tissue. And since the hypophosphites are so valuable in forming healthy blood, they are to be regarded as the best of food tonics in the treatment of the defective nutrition characteristic of phthisis.

"Syrup of the hypophophsites compound" is an appetizing, pleasant, invigorating nervine and general tonic and food. It increases the appetite, promotes digestion and the assimilation of food.

What has been said inferentially of its great tonic and restorative value in phthisis, is equally true of its value in chronic bronchitis. In fact, in *all* the diseases marked by nervous and muscular debility—whether in the wasting marasmus of the tissue-starving infant, or in the exhaustion of brain energy from mental overstrain, or in the declining and failing powers of old age—this is the tonic *par excellence*—the nutriment *sine qua non*. It contains many of the important salts of that complex fluid—the blood—potash and lime, so essential to the muscular, osseous and nervous systems, and iron and manganese, the great hæmatics, so necessary to enrich the blood and strengthen the body. It also contains the two great vegetable tonics, quinine and strychnine, both of which, in small doses, are of great value as nervine, as well as general tonics. These, as bases, are all in combination with hypophosphoric acid.

Now these different salts are readily decomposed or "broken up" in the stomach, and phosphorus is liberated and furnished in its free state, which is conspicuously present as a component of brain, nerves, semen, etc. Phosphorus is indicated in cases of nervous exhaustion and debility, so often met with, and so deplorably affecting and afflicting suffering humanity.

This "syrup of the hypophosphites compound" is not unpleasant to the taste, and can be readily and easily taken even by children,

without disturbing the digestive functions, and is indicated whenever the nervous system is suffering from exhaustion or malnutrition, and needs repair.—By a Fellow of the Medical Society, in *Virginia Med. Monthly*, Oct., 1888.

DIGITALIS AND HOW TO USE IT.—The indications for the use of digitalis in the treatment of affections of the heart are still far from clear, and as matters stand at present the practitioner has to proceed cautiously, taking for his guide the aphorism *a juvantibus et lædentibus fit indicatio.* Digitalis is a double-edged weapon in therapeutics. With it we can calm or we can produce palpitation, and we can relieve or bring about asystole. For so powerful a drug to prove of benefit it is evidently necessary to be acquainted with the indications for and the contra-indications of, its use, to know when it is likely to be of service and when hurtful, or at any rate useless, and to know, moreover, how to give it.

The first step in the inquiry would naturally be to ascertain the precise physiological action of the drug on the heart, but unfortunately observers differ very materially even on this apparently elementary point. According to Dr. Huchard, who recently published a very admirable monograph on the subject, the action of digitalis differs according to the animal experimented upon. In cold-blooded animals the drug always arrests the heart in systole, while in warm-blooded animals it stops sometimes in diastole and at others in systole. Very active as regards rabbits and guinea pigs, birds are almost proof against its effects. It not only differs as between one animal and another, but experience proves that it is unsafe to infer from its action on the healthy, the effect that it is likely to produce in disease, nay more, that its effects vary greatly according to the nature and period of the disease and the extent of the cardiac lesions. A patient with pneumonia is extremely sensitive to the influence of digitalis, while confirmed inebriates are enabled to resist enormous doses, in the latter case probably because the process of assimilation is slowed and the patient is in a condition of "therapeutic ataxia." Individuals with diseased arteries and the aged, bear digitalis badly, as do patients in the earlier stages of interstitial nephritis.

It has been stated that digitalis does not produce the same effects on the healthy as on the subject of disease, in the first stage of cardiac disease as in the third. Take, for example, a patient with aortic disease in which the lesion is fully compensated. If he be given digitalis, and the pulse-rate be slightly reduced, some slight diuresis may be produced, and the beat will be excited rather than calmed. When the same patient has arrived at the hypersystolic period, the heart-beat being feeble, irregular and unequal, then the drug which at the earlier stage produced hardly any appreciable effect will determine a copious secretion of urine, with a slower, stronger, and more regular beat. It is evidently unjust to consider digitalis as always a calmative of the heart, nor is it as Beau suggests, "the quinine of the heart," for it may prove to be neither one nor the other. What it does is to regulate the circulation as a whole.

Although accidents due to the employment of digitalis are by no means common, the possibility of their occurrence should be borne in mind. It may be well to remark, *en passant*, that drugs possessing a cumulative action should be given preferably in a liquid form, so as to avoid an accumulation of doses as well as of effect. Digitalism, it should be noted, rarely supervenes in dropsical patients, so long as any œdema remains. If, however, the drug be continued after the disappearance of the infiltration, the symptoms are produced with far greater ease. The first indications of saturation are effects quite opposed to those which follow the exhibition of the drug therapeutically, viz., acceleration of the heart-beat and lowering of arterial tension, a proof that digitalis, which relieves asystole, may, under certain circumstances, give rise to it. Many of the symptoms are very liable to be ascribed to the malady instead of to the drug, such, for example, as hallucinations, somnolence, delirium, vertigo, interference with sight, diplopia, headache, precordial anxiety, etc. Vomiting is comparatively frequent, with epigastric pain and diarrhœa. All these untoward effects, however, may be avoided by prescribing the drug according to the rules which have been laid down.

As a general rule, digitalis, is contra-indicated in all valvular affections, whatever their nature, when these are sufficiently or over-compensated. It is indicated in all valvular affections where compensation has not been established. In short, digitalis is the remedy for asystole, and not for this or that valvular affection. The diagnosis of the particular valves involved has but little importance in so far as the indication for digitalis is concerned, nor does the loudness of the bruit afford any information of value either in respect of the severity of the lesion or of the need for digitalis. In short, it is the condition of the cardiac muscle, its enfeeblement, as evidenced by clinical observation, which should be held to justify its use.—*Med. Press*, Sept. 5, 1888.

THE OPERATIVE TREATMENT OF PULMONARY ABSCESS.—The success which has so far attended the treatment of abscesses in the lungs by operation constitutes the latter a legitimate department of surgery. Dr. Quincke, of Kiel, reports two cases thus successfully treated during the past year (Berliner Klin. Wochenschr., No. 18, 1888). A year ago, Dr. Quincke also reported two cases treated by operation (Berliner Klin. Wochenschr., No. 19, 1887). Taking this latter pair of cases first, in one a young man had a chronic abscess in the lower lobe of the left lung, apparently due to acute pneumonia two years previously. The abscess was opened, resection of the ribs being performed, and the man recovered in so far that he was able to work and felt quite well, but a permanent fistula remained. The inconvenience of this the man himself obviated by making a small tin receptacle, attached to his side, holding a little carbolic acid. When examined three years after the operation, the lungs expanded equally, and the chest was symmetrical except for a slight depression over the site of operation. There was no expectoration. The importance of securing adhesion of the pleural surfaces is shown by the next case, treated in 1887. Here the patient, a woman, aged 26, pre-

sented all the clinical signs of a large pulmonary abscess, including the expectoration of a large quantity of fetid pus. An attempt was made to set up an adhesive pleuritis by the injection of iodine into the pleural cavity. This caused pain, and a friction sound was soon heard; but the adhesions gave way soon after the abscess was opened, and purulent pleuritis caused death in three weeks, in spite of incision and injections. The author, with his present experience, would resect the ribs at the site most convenient, and reopen the abscess, in such a case. It is more difficult to induce firm adhesion of the pleuræ than in the case of the peritoneum, owing to greater disturbance during respiration; and the adhesions must be really firm, in Dr. Quincke's opinion, so as to withstand the elastic retraction of the lungs from the chest wall. Complete success was obtained in the two cases treated last year. In the first of these a man, aged 32, after symptoms of apparently an atypic pneumonia of a chronic character, suddenly expectorated a very large quantity of fetid pus, and the clinical signs left no doubt as to the existence of a pulmonary abscess, and not an empyema communicating with a bronchus. Radical measures were adopted; the eighth and ninth ribs were exposed on the right side, by the use of chloride of zinc, after preliminary incision. They then were resected for four or five centimetres, and next day chloride of zinc paste was again applied to the bottom of the wound. After a week, a capillary thread was introduced, allowing the escape of fetid pus, and the canal thus formed was gradually widened by the thermocautery till the drainage-tube could be passed and the pus evacuated. Within three weeks, expectoration ceased altogether, and the man, who had improved daily during this time, convalesced steadily. The right side did not expand quite as fully as the left four months after the operation; but the patient had gained 46 pounds in weight, and felt quite well.

The other case was not so typical, but is also instructive. A man, aged 23, had an acute illness, the symptoms of which pointed to either abscess of the lungs, or empyema communicating with a bronchus. But a friction sound persisted; exploratory puncture yielded no pus, and the muco-purulent sputa often held blood. Cavernous signs were absent at first. The illness was too acute for bronchiectasis. The operative treatment was the same as the foregoing, and, after six weeks, the patient was sent home cured. The left side (the side affected) expanded a little less than the right; the wound had quite healed, and there was no expectoration. In this case the first incision was made in the ninth intercostal space, and chloride of zinc paste was frequently applied for eighteen days before the ninth rib (now laid bare) was resected about an inch. The abscess was never opened in this case, for the insertion of a hollow needle twice yielded no pus, and the man improved steadily from the date of operation, so that further interference was deemed unnecessary. Dr. Quincke considers such an operation suitable also for bronchiectatic and tuberculous cavities. Such treatment in these cases has not met with much success hitherto, because the lung is usually in too diseased a condition around the cavity to effect its closure by elastic compression. The chloride of zinc applications, by setting up local inflammation, induce the same effect ultimately by cicatricial contraction, and therein lies the chief advantage of this mode of operating.—*British Med. Journal*, Sept. 22.

THE TREATMENT OF DIPHTHERIA.—In the last number of the Bulletin General de Thérapeutique, Dr. G. Guelpa, of Paris, insisted on the value of irrigations of perchloride-of-iron solutions in diphtheria, and states the following propositions:

1. Every case of diphtheritic angina not complicated with any other infectious affection, is followed, almost without exception, by recovery in the space of a week, if it be combated within the first twenty-four hours of its existence by irrigations in the throat and nares of a one-per-cent. aqueous solution of perchloride of iron, and if these irrigations are practiced at least twice or three times every hour during both day and night.

2. In general, these irrigations in the throat prevent the extension of the diphtheria to the larynx and trachea.

3. In cases of croup, especially if tracheotomy be early performed, pulverizations of the perchloride solution through the canula afford a good means of combating the disease, and increase greatly the chances of success.

Guelpa claims extraordinary results from this treatment, which, he says, must be carried out pitilessly in a disease so fraught with mortality. He dwells on the importance of the solution of ferric perchloride being weak, not concentrated. A solution of one per cent. can do no harm if swallowed, or if it penetrate the larynx. Indeed, the latter contingency, according to this authority, is one rather to be sought for than avoided. There certainly, he says, is no danger that the ferric solution shall penetrate the air-passages below the larynx. The lavage of the larynx by the solution is one of the favorable conditions of the treatment: it is the only means of accomplishing the antisepsis of this organ, and it is the true preventive treatment of croup.

As for the means of making these irrigations, a common rubber ball injector with suitable nasal or mouth-piece is used. The child (in case the patient be a child) must be held firmly, the head being pressed between the left elbow and chest of the operator, the left hand of the latter being applied to the child's forehead, while, with the right, the canula of the irrigator is slipped into the mouth of the little patient. Advantage can sometimes be taken of the absence of a tooth for effecting this object. With the penetration of the canula, an effort of vomiting is generally excited. Then the operator presses upon the rubber ball, and the whole region of the fauces and pharynx is thoroughly and rapidly irrigated. The operation is done in a very few seconds, and without inflicting any suffering on the patient. But little of the injected liquid is swallowed, as the pharyngeal contraction which is excited expels most of it by the mouth. The nasal injections are less easily made than the buccal, but they are often indispensable, especially where there is a tendency on the part of the diphtheritic membrane to gain the nasal cavities. To prevent this untoward result, they may be given occasionally—every two or three hours.

Guelpa claims that his method is much easier

of application than the swabbings or paintings of the throat so frequently practiced in diphtheria, or even than the administration of perchloride of iron mixtures by mouth at relatively short intervals.

It is needless to say that new modes of treatment of diphtheria have been the order of the day for the past forty years; but the method of Guelpa (who, by the way, is no mean authority on the subject) seems to have some measure of rationality in its favor, but the forcing a child to submit to such a process at such short intervals will be an insuperable objection.—*Boston Med. and Surg. Jour.*, Oct. 11.

Liquor Sodii Ethylatis in the Treatment of Lupus.—Miss ——, aged 58, was first seen on May 1st. She has suffered from lupus of the face for fifty-four years. During this time no local means of removing the disease appear to have been adopted. The right side of the face was covered with cicatricial tissue and the lower eyelid was everted. The surface over the masseter muscle down to the angle of the jaw was covered with a patch of lupus exedens. The whole of the nose was similarly affected, and there was another patch above the inner canthus of the same side. On May 9th chloroform was given by Mr. Pearse, and I scraped the lupoid surfaces with a small oval-shaped Volkmann's spoon, taking care to thoroughly remove the whole of the diseased tissue, and then applied nitric acid with a glass rod. The wounds healed in a fortnight. After a little time, however, several small patches appeared, one above the inner canthus, one over the prominence of the right malar bone, another immediately in front of the ear, and others on the left side of the nose, on the right half of the upper lip and immediately external to the right angle of the mouth. An anæsthetic was again administered on June 28th, and these patches treated as in the first operation. These soon got well, with the exception of the patches near the mouth, which were prevented from healing by the constant movements of the lips. Shortly after this second scraping several small patches appeared, and in the course of a day or two grew so rapidly that every time the patient was seen they were much larger. I then decided to treat them with the liquor sodii ethylatis. This was applied to the patches with a glass tube, which had a very small bore, once a day for three consecutive days. Two or three days after the last application of the solution the patches were covered with dry scabs, which either fell off themselves or were easily removed with a pair of dissecting forceps, leaving a perfectly healthy surface beneath. Since this time other small patches have appeared, and these have been treated in a similar manner. The treatment has been so successful that the appearance of the patient is vastly improved. She is anxious now to have an operation for the ectropion performed.

The advantages of using the ethylate of sodium solution in the treatment of small patches of lupus are that it is not necessary to give an anæsthetic, and so the idea of having an "operation" performed is removed from the patient's mind. It only takes a minute or two to apply the solution; a very slight tingling is produced, which passes away in three or four minutes. After the removal of the scab there is no wound left to heal, and consequently there is no necessity for the patient to walk about with a dressing on the face. In this case the recurrence of fresh places was rapid after the second scraping operation, while the new patches which have appeared during the time the ethylate of sodium treatment has been carried out have been small, and have grown slowly. I am perfectly aware that this method is not by any means new, but I think the success of this case justifies my calling attention to it. During the time the solution is being applied, no water should be allowed to touch the parts.—L. A. Taylor, in *British Med. Jour.*, Sept. 6, 1888.

The Treatment of Laryngeal and Pulmonary Phthisis by a Spray of Hot Vaseline in Conjunction with Menthol and Iodoform.—Iodoform was, several years ago, much employed in the treatment of pulmonary phthisis, dissolved in oil of terebinth, and sprayed by means of the steam atomizer. The results were encouraging, but the combination was extremely disagreeable to patients and attendants. Cod-liver oil is an excellent solvent for iodoform, and when sprayed floats in the atmosphere of a room in a remarkable way; but, upon the whole, pure vaseline is a better menstruum, and, with the addition of a few drops of ol. eucalyptus, the odor is quite bearable, and the results sometimes more satisfactory than those obtained from menthol. The formula used is as follows:

℞ Iodoform pulvi, gr. x.
Ol. eucalypti, gtt. v.
Vaseline, ℥ ss.
M.

Both menthol and iodoform are antiseptic and anesthetic, thus fulfilling the two very important indications of allaying cough and modifying expectoration, but in addition have points of difference which will influence the selection of one or the other. Menthol is stimulant to the vascular tissues and promotes absorption, while iodoform possesses valuable alterative properties; hence, it is better to select one and keep the other in reserve, as the antiseptic properties of either are sufficient.

The addition of cocaine may be necessary in cases of laryngeal phthisis, but one of the other two remedies will usually be found capable of affording, in cases of pulmonary phthisis, great relief from cough and of diminishing expectoration and improving its character.—Dr. Howard Smith, of Charleston, Mass., in the *Journal of the American Medical Association*, Sept. 22, 1888.

The Administration of the Iodides.—Dr. Sée, says our Paris correspondent, finds that most patients prefer the iodides simply given in water. What is it, he asks, that is removed here? Evidently not the microbes or their products, which can not well be destroyed. It is the newly formed tissues themselves, or the fatty elements that go to make them up, that are reduced in amount. Cure by the iodides, then does not depend on a specific ac-

tion, but on a general modification of nutrition either for good or for evil. The patient either gets better and fatter, or worse and thinner. As to the idea that the potassium salts are muscular poisons, he shows that the sodium salts injure the excitability of muscle as rapidly as the potassium salts. Next, as to the allegation that potash has a poisonous action on the heart, he says that it also is false. Bernard and Traube *injected* potassium salts to prove that it is well founded; but this has no relation to iodide of potassium taken by the stomach. As much as from one to four drachms are often given without producing any bad effect. As to potash itself, Dr. Sée shows that Bunge had calculated that there were 96 grains of potash in 3 ounces of potatoes; so that the poor Irishman who eats 32 to 48 ounces of potatoes a day swallows from 2⅓ to 2½ ounces of potash! What is this compared to the 30 grains that we give a day? This fear of potash is not founded on fact. Finally, the iodide of sodium has been said not to cause iodism, but, in truth, patients taking it have just the same symptoms of eye, nose, and other mucous troubles as with the potassium salt. The elimination of the iodide by the saliva is the same; the same metallic taste and repugnance for good food follow, and, moreover, more of the sodium salt must be given to produce an effect. Professor Sée concludes that there is nothing to be gained by giving the sodium salt, while potassium iodide possesses certain advantages on account of which it should retain the favor in which it has always been held.—*N. Y. Med. Jnl.* Oct.'88.

THE BROMIDE OF SODIUM VERSUS BROMIDE OF POTASSIUM. — Experience shows us that large and continued doses of the bromide or iodide of potassium engender uncomfortable symptoms, which have been attributed by some to the basic element in the drug. The continued use of the iodide of potassium causes loss of appetite, nausea, and emaciation, while the bromide of potassium, administered for a considerable length of time, occasions pain in the epigastric region. If we could find a better vehicle than the potassium for the acid element, we should have less annoying sequelæ. The salts of sodium are occasionally substituted with advantage. It has been urged that from the different combining weights of potassium and sodium we gain a marked advantage from the use of sodium, which is only 22.99 as compared with 39.04 for potassium. The combining weights of iodine and bromine being respectively 126.53 and 79.75, it is evident that ten grains of bromide of potassium contain 6.72 grains of bromine, while ten grains of bromide of sodium contain 7.76 grains of bromine, making 8.6 grains of bromide of sodium—equal to ten grains of bromide of potassium. Of the iodide of potassium, ten grains equal nine of the iodide of sodium, so far as the relative proportions of iodine are concerned. At the present time we are accustomed to interchange these doses, but it should be remembered that in giving the sodium salt we are giving a less quantity of the prescribed vehicle, as well as a more wholesome drug. The salts of sodium at the present time are, it is true, more expensive than those of potassium, but this may be explained on the ground of a slow demand, as sodium is properly a cheaper substance than potassium, and the increased use of the salts of sodium would doubtless lower their cost even beneath that of their substitutes. — *Medical Bulletin*, 9, '88.

A NEW METHOD OF TREATING ABSCESSES. —Dr. W. C. Wilde describes, in the Journal of the A. M. A., as follows: "As soon as I am satisfied that pus has formed, I plunge into the cavity a large-size aspirating needle, and attach to it an Allen surgical pump, and by turning the crank, remove all that is possible of the contents of the sac. I then take a 20-volume solution of Peroxide of Hydrogen. To this I add an equal volume of water; and by reversing the motion of the handle of the pump, without withdrawing the needle, I inject the cavity until it is moderately distended only. Almost immediately I find that the distension becomes greater and greater, until I am satisfied that the medicament has reached every nook and corner. Then I simply turn the pressure off from the rolls of the instrument at the back of the pump; the accumulated gas which has been given off rushes through the tube, carrying with it a considerable quantity of *débris*. I tighten the rolls again; and, continuing the motion of the instrument in the same direction, I extract every particle that is left, and repeat the procedure as before. At the second washing with the Peroxide, I notice that I do not get nearly as much distention; and when the screw at the back is loosened for the second time but little of the gas and fluid comes away. After this comes off I am sure that I have a perfectly clean cavity. Now I take a solution of bichloride, 1 to 2,500, and again inject and withdraw two or three times. I am confident that I have a perfectly aseptic cavity. At this stage the needle is removed, and I place over the whole integument overlying the abscess a smooth, even pad of iodoform gauze. I bind it firmly and neatly in place by an abundance of bichloride gauze bandage. This dressing I invariably leave in place from four to ten days, when I find complete closure of the cavity, perfect adhesion of its walls, and not a trace of the abscess left. The patients are simply delighted that no knife is used, and but very little pain produced; no after-dressings required; no salves, solutions or ointments; no washings or daily dressings."—*Amer. Med. Jnl.*, Oct. '88.

DIET IN THE CONVALESCENCE OF TYPHOID FEVER.—A paper read by Dr. Hutchinson, of Philadelphia, at the recent meeting of the Association of American Physicians, on the "Management of the Stage of Convalescence in Typhoid Fever," dealt fully with the risks attending this important period of the disease, and elicited a most interesting discussion upon the question of diet, about which opinion in the profession is still divided. Dr. Peabody, of New York, urged that, in mild cases, solid food might be given with advantage on the subsidence of the fever, when an urgent craving existed. He had never seen any ill effects from finely divided meat given once or twice a day. Dr. Ord, of London, quoted a remarkable instance in support of the plan of allow-

ing the appetite of the patient to be the guide in diet.

No absolute rule can be laid down, and each case must be considered by itself. The majority of practitioners will continue on the old plan of carefully regulating the diet during the first ten days after the temperature falls to normal. Relapses, we believe with Dr. Kinnicutt, are rarely the result of imprudence, but the consequence of reinfection, and the rise in temperature, which we occasionally see after taking solid food, is not often more than a recrudescence of the fever. An early return to mixed diet, if carefully regulated, is rarely followed by grave complications, but almost every one with large experience has met with cases of perforation or peritonitis the result of some grave imprudence on the part of the patient. A deep ulcer may leave only a thin layer of the muscularis covered by the peritoneum, and we have known a full meal of mutton-chops, in the third week of convalescence, to be followed by a fatal peritonitis from perforation.—*Med. News*, Oct. 13.

PICHI.—Dr. Knight, in the North-American Journal of Homœopathy, says:

My mode of administering pichi has been as follows: From fifteen to thirty drops in one-half glass of water, a tablespoonful every one or two hours, or ten drops, four times daily, in vichy.

A synopsis is given of seven cases treated with the remedy, all with most satisfactory results. The diuretic action is slight. Dr. Knight says:

We notice readily the remarkably effective action as a sedative upon the irritated urinary passages. In cases where a febrile, highly acid, concentrated urine brings about a sensitive condition of the bladder and urethra, with its accompanying spasmodic action bordering upon a true inflammation, it seems to act as a specific.

That it is efficacious in a chronic inflammatory condition of the bladder, is shown very plainly. In acute cystitis I have as yet had no opportunity to try the remedy, but should not hesitate to recommend it.

The remedy is recommended for cases showing a lithæmic condition, and I have several cases of that nature in my dispensary and private practice under observation, but as yet there has not been time enough to achieve any definite results.

That the remedy has any influence in organic diseases of the kidney, I believe is not claimed. *North-American Journal of Homœopathy.—Epitome.*—(Parke, Davis & Co., furnish a reliable preparation of it, as we know by personal use.—Ed. *Mass. Med. Jour.*)—*Mass. Med. Jour.*, October, 1888.

THE VALUE OF INHALATIONS IN THE TREATMENT OF LUNG DISEASE.—E. Theodore Williams, M. D., F. R. C, P., concludes an address on this subject, published in the British Medical Journal, September 29th, as follows;

1. The success of inhalations as a mode of medication depends principally on the easy convertibility into gas or vapor of such substances as are clearly desirable for the purpose.

2. That, consequently, bodies which are volatilized at ordinary temperatures are more readily absorbed by the lungs than bodies which have to undergo combustion before conversion into gases.

3. That the moist inhalations, where steam, watery vapor, or spray is the vehicle of medication, are absorbed by the lungs, and enter the circulation in small quantities, and, in some cases, not at all, the slow rate of pulmonary absorption contrasting strongly with the rapidity of gastric absorption of the same medicines when swallowed, as proved by their detection in the urine.

4. That medicinal inhalations are more useful in diseased conditions of the pharynx, larynx, and larger bronchi than in those of the alveoli and lung parenchyma.

5. That in pulmonary disease the antiseptic respirators, while they lessen cough and reduce expectoration, exercise no lasting remedial influence on the diseased conditions of the lungs, and often seriously interfere with the freedom of respiratory effort, which is so desirable in the treatment of such affections.

COCAINE LOCALLY IN VAGINISMUS.—I have just employed cocaine in a case of vaginismus, and, as I have not yet seen any account of its use in such a case, I am hoping this note may be of interest.

Mrs. T., aged 23, married one week, came to me with her mother on August 11th, both ladies in great distress. During coitus the young woman suffered such agony that, although she had taken anodynes before going to bed, and was resolved to suffer without complaint, her cries and groans could be heard all over the house. The husband declared that his wife was not like other women and threatened to leave her.

On examination, I found the vagina very short; but otherwise it and the uterus appeared quite normal. There was such spasm of the constrictor vaginæ that I could only introduce one finger, and that was tightly grasped and caused pain.

I prescribed an ointment containing gr. v. to the ounce of hydrochlorate of cocaine; a small piece to be inserted well into the vagina before going to bed and the parts well steamed.

The result has been satisfactory; the husband is satisfied, and the wife suffered but slightly, although coitus is not yet entirely free from discomfort.—John D. Hayward, in the *British Medical Journal*, September 29th.

UNTOWARD ACTION OF SULPHONAL.—The following case, reported by Dr. Schurey, in the Therapeutische Monatshefte for July, is interesting, as illustrating the untoward action of sulphonal. A patient of sixty-one years, with arterio-sclerosis, suffered with attacks of angina pectoris and insomnia. By the use of amyl nitrite the attacks were aborted and the intervals between them lengthened. The sleeplessness was successfully overcome by the use of amylene hydrate. The patient, after a time, unwilling longer to take the latter, on account of its disagreeable taste, sulphonal was prescribed in doses of thirty grains. The result was surprising. Soon after the ingestion of the drug the attacks of angina pectoris recurred with great frequency; a few minutes

after one attack was checked by amyl nitrite another began. This lasted throughout the night. There was no real sleep, but two hours after the administration of the remedy a sort of half slumber, interrupted by frequent attacks, was had. For the next two days the attacks continued with increased violence and frequency. The author cautions against the administration of sulphonal in cases of arteriosclerosis.—*Wiener medizin. Presse*, July 29, 1888—*Med. News*, Sept. 22.

COCAINE IN HYDROPHOBIA.—Dr. S. Fubini, of Palermo, has recently reported a case of hydrophobia in which local applications of cocaine gave marked relief in the characteristic spasms of the throat. The man had been bitten on the hand by a mad dog six months before. Three of his companions, who were bitten at the same time, had their wounds promptly cauterized, but the patient thought his too trifling to require attention. He was the only one in whom hydrophobia supervened. The spasms of the larynx and pharynx were extremely severe and painful, and the patient, though suffering burning thirst, could not bear the sight of liquids. Dr. Fubini brushed the pharynx with a one-in-twenty solution of hydrochlorate of cocaine, with the result that the spasm almost immediately ceased, and the man was able to drink without the least difficulty. There can be no doubt that the case was really one of hydrophobia; all the classical symptoms of the disease were present, and subdural inoculations of the patient's medulla in rabbits produced well-marked rabies in those animals. The case shows the value of immediate cauterization of bites, as well as the utility of cocaine in relieving symptoms.—*British Medical Journal*, September 29th.

CACTUS GRANDIFLORUS IN HEART DISEASE.—The Chemist and Druggist, August 11, 1888, says that this remedy for heart disease was the subject of a recent paper by Dr. Orlando Jones, of Harrogate. Cactus grandiflorus is a native of Jamaica and Vera Cruz. A good description of this plant is given by Grim. Its flowers are remarkable, being very large, the calyx measuring about a foot in diameter. It is possible, Dr. Jones thinks, that other plants of this order may be equally valuable, as possessing properties that will control the heart's action, for Professor Robert Bentley states that the fruits of many species are useful in febrile diseases. Dr. Jones gave notes of cases in which the remedy had been used, and the results appeared to show that this remedy may be used as a substitute for digitalis when that remedy is inapplicable owing to its over-stimulating action, and in cases of feeble heart. The final stage of the action of the drug is that it strengthens the heart, and consequently improves the circulation, so that the result of the exhibition of cactus is the reverse of that seen in digitalis.—*Med. and Surg. Reporter*, Oct. 6.

A NEW TREATMENT FOR GONORRHŒA.—Dr Charles J. Smith calls attention to a new and successful method of treating acute gonorrhœa, based on antigermicidal theories. By means of a specially designed urethral syringe he introduces a mixture of olive and eucalyptus oils, which is made to traverse the urethra from behind forwards. He claims that in this way the inflamed areas are thoroughly disinfected in two sittings, and that within a week only a mild form of simple inflammation is left to deal with. He uses a mild astringent injection between and after the application of the ointment, but even this he considers is superfluous. If this method of treatment only obtains in other hands the success which seems to have attended its use in Dr. Smith's hands, he will have conferred a boon on suffering humanity. *Med. Press*, Sept. 26.

VERNONIA—A NEW FEBRIFUGE.—Batiatior, or batjenjort, grows as a plant on the West Coast of Africa, and its root is sold as a febrifuge. MM. Heckel and Schlagdenhauffen have shown that it does not contain emetine, though it yields a glucoside in the form of a white powder soluble in alcohol. The alcoholic extract causes paralysis, and if the dose is large enough, the heart ceases to beat in systole just as with convallaria, digitalis, and strophanthus cuspidus. Similar effects were obtained in pigeons. The toxic dose of vernonine, the glucoside in question, is twenty-four times that of digitaline.—*Lancet*, June 30, 1888.

NUTRIENT AND SEDATIVE ENEMA.—The Revue de Thérapeutique recommends the following formula:

℞ Bouillon of beef, ℥ iij ʒ j.
Eggs, j.
Bordeaux wine, ʒ vj gtt. vx.
Sodium bicarbonate, gr. viij.
Tincture of opium, gtt. iv.
Chloride of sodium, gr. iij.
Peptone, ʒ iv. M.
—*Jour. Amer. Med. Asso.*, Sept. 29.

FOR MIGRAINE.—

℞ Antipyrine, ʒ j.
Old rum, ʒ v.
Syrup of lemon, ʒ vij.
Water, ℥ ijss.

M. Sig. ʒ ij. as required.
—*L'Union Médicale*, Aug. 25, 1888.

DYSPEPSIA OF INFANTS.—

℞ Acidi hydrochlorici diluti, ♏xv.
Syrupi aurantii, ʒ jss.
Tincturæ aurantii, ʒ j.
Infusi cascarillæ, ℥ jss.

M. Sig. Teaspoonful twice daily.
—*Jour. de Méd. de Paris.*

TREATMENT OF BURNS.—Wende speaks very highly of a dressing for burns, composed of cocaine, four per cent., and lanolin. This mixture should be freshly prepared and the cocaine perfectly pure. It assuages pain immediately and the healing takes place rapidly.—*Journal de Med. de Paris.*

The Medical Age.

Vol. VI. DETROIT, NOVEMBER 10, 1888. No. 21.

Original Articles.

A CLINICAL LECTURE.

BY D. A. K. STEELE, M. D., CHICAGO, ILL.*

CONGENITAL CYSTIC TUMOR.

GENTLEMEN:—We have before us to-day a little boy, 5 years of age, who has some trouble with the left side of his neck, which has existed since he was about three weeks old. It has never been very painful; it has never been operated upon, nor injections made, but some local treatment have been applied.

Now, the first question we have to consider in examining a tumor or swelling of the neck is as to its nature. We have a variety of growths or swellings which we call "tumors;" we divide them into two classes, solid and fluid. We again divide them into simple and malignant tumors, single and multiple, and so there are a great many subdivisions.

We have here a tumor that is of four or five years' duration. Possibly, it is a congenital cyst or congenital tumor. The growth has been exceedingly slow, which is in favor of its benignity. There is this singular fact about it: it changes its size; it increases at times, and again diminishes. Now, the peculiarity of a tumor that is changeable in its contour or outline, that enlarges and diminishes in size is, that it is usually a vascular tumor, that is, the blood-supply varies at different times. The best example of that class of tumors would be an enlargement of the thyroid gland. The enlargement of a normal gland and stricture is chiefly composed of vascular elements, of connective tissue, containing a large number of blood vessels.

When I commence to examine this tumor, and throw the boy's neck back, you get the outlines of the growth. You notice that when he cries the vessels of the neck are filled with blood, that the tumor becomes more prominent with its outline better marked.

The way to first examine any tumor is, of course, by inspection. We know its location, its general appearance and outlines, and having ascertained that, then we proceed by palpation to find out its character.

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We have to deal in this case with a semi-fluctuating tumor, which is soft and compressible, and which is, in my opinion, a congenital cystic tumor of the neck, probably connected with the thyroid gland. On inquiry we find that this boy comes from a tuberculous family. Where we find a tumor in this locality of the neck, we should always examine the throat to see whether the tumor originates from the tonsils or pharynx. I find the boy's tonsils are very much enlarged on the left side. In adults we frequently find the tonsils enlarged and ulcerated. This is not so apt to be the case in young children. I believe this to be a benign tumor. What else might it be? Remember it is soft, compressible and painless. There is no change of color. A chronic tuberculous abscess of a lymphatic gland that had undergone suppuration, breaking down, and the formation of a glandular abscess—in that case we would find the skin so adherent to the tumor that it would not be freely movable as in this case. It might be an aneurismal tumor. Aneurisms in this locality, or near it, not infrequently develop—as aneurism of the carotid artery, for example. It might be an aneurismal varix, but in that case we would have the superficial veins enlarged and a greater influx of blood in the tumor than we have here. If it were an acute abscess of recent origin, of course we would not have anything like the history this boy gives. It would only date back a few weeks. It is not an aneurism. Then, again, there are certain characteristics of aneurismal tumors that are always present, among which is the blowing or "bruiting sound," as it is denominated, which results from the blood being thrown into it. If it were an aneurism it would be compressible; we could diminish the size of it in all directions; we would have distinct pulsation, which is always present in such growths, and which is absent in this case. If we have dilatation of, or a tumor resting upon, the carotid, we would have absence of the characteristic bruiting to which we have referred; we would have pulsation only in one direction. That is an important point in the diagnosis. In a true aneurism we have expansions of the tumor in all directions. If the tumor is resting upon the artery you only have it from below upwards, not in all directions; the current of blood elevates the tumor, or raises up the vessel upon which the tumor rests.

With reference to abscess in this locality; we

usually have the skin reddened upon the surface. We would have a history of chill, constitutional disturbance, and pain, a more marked interference with the general health than we have in this patient. This little boy looks strong and rugged in appearance.

What other tumors might occur in this region? We might have a lipoma. A fatty tumor is of slow growth; it is painless but usually movable. Lipomatous tumors are sometimes migratory, that is, they have the power of moving from one portion of the body to another. For instance, if they develop upon the shoulder, from increased weight or pressure or size, but more particularly on account of their loose connections, they have a tendency to go lower down the shoulder. Cases have been reported in which lipoma having first been discovered over the scapula, in the course of years, was found three or four inches lower down the back. Lipomas give an indistinct sense of fluctuation; they resemble cystic tumors largely. You differentiate between a lipoma and cystic tumor by aspiration. Introducing your aspirator needle, if you have a fatty tumor, you get a *dry tap.*

We might, furthermore, have a fibroid, a sarcoma, carcinoma, an inflamed gland, or mumps developed in this locality—growths which are more or less tender and painful on pressure. A fibroid tumor has a peculiar sense of resistance; it is hard, heavy, and not so movable as cystic growth. We have enlargements in young children in this locality, such as a fibroid, degeneration of the sterno-cleido-mastoid, I have seen a number of these cases in young children, where traction of the forceps in delivering the child had lacerated or injured the sterno-cleido-mastoid muscle, and as a result of the traumatism a fibroma developed.

In examining a tumor of this sort the patient should be placed on his back, with the head thrown well back so as to render the region tense, and then outline the tumor.

We will anæsthetize the boy and proceed to examine the tumor by the crucial test, and, if cystic, to determine what the character of the fluid is, then we will be guided as to the plan of treatment to be adopted. If it is a congenital cyst with some implication of adjacent cervical glands subsequently diseased, we simply make two openings, one below, and the other at the upper part of the cyst, pass a drainage tube, and allow it to close by gradual contraction. I will now thrust a hypodermic needle into this growth. You notice it contains fluid. We have therefore, as I have previously stated, a congenital cystic tumor, implicating a portion of the thyroid gland. I will now make an incision at the point where I withdrew the fluid, then make a counter-opening higher up and draw through a drainage tube. We will afterwards pack the cavity with strips of iodoform gauze and allow granulation to go on.

TUBERCULOSIS OF THE NECK.

The next case we bring before you is one of tuberculous affection of the neck. It is a case of inherited tuberculosis, his father and mother having died of phthisis. Two or three years ago he noticed a swelling upon the right side of the neck; shortly afterwards two little bunches or lumps appeared. These lumps continued hard for a time, subsequently became somewhat softer, and finally broke, opening spontaneously, and discharged a thick, curdy, tuberculous pus, then closed up and after exposure to cold again re-opened. That has been the history during the last two years—alternately swelling, suppuration, discharge, closure for a time, re-opening, discharge, closure, etc.

Here, you see, is the normally pigmented skin of the negro, being still further discolored around the opening beneath the lobe of the right ear. There are other pigmented spots, but they are not quite so marked. Making pressure upon the affected area you notice an oozing of the characteristic thick, curdy, yellowish, tuberculous pus to which we have alluded. The skin is somewhat adherent. The least pressure causes blood to exude, showing that the abscess cavity is filled not only with pus, but with some granulation tissue, and pressure causes rupture of minute capillary vessels. This was the original lump. Below we have a second lump with the skin more adherent, and farther down we have a large one that has not opened spontaneously; on the left side of the neck we have the same condition in a more marked degree, which has only appeared during the last two months. He has been subjected to internal treatment only; has had no operation.

What is the nature of these tumors of the neck? They are undoubtedly tubercular. We have a tuberculosis here of the cervical lymphatic glands, commencing upon the right side, subsequently appearing on the opposite side, so that the majority of the lymphatic glands of the neck are now in a condition of tuberculosis.

Cases of this sort can only be treated successfully by thorough extirpation of all the diseased gland tissue. Opening these abscesses, by incision and drainage does not give satisfactory results. It will apparently cure a patient for a time. The tuberculous abscesses will heal up within a short time, but by and by they will re-open just as they have in this case. It is necessary to make a free incision down upon the diseased gland and remove not only the broked down gland structure, but the capsule of the gland as well. All of the diseased portions must be thoroughly removed. It is better not to make a number of incisions for

each of the diseased glands, but to make a long free incision, three or four inches, and then peel them out of the connective tissue. This is sometimes a rather difficult task to perform, for they are usually firmly adherent to the skin, connective tissue, and blood-vessels, particularly if suppuration has taken place. Everything seems matted together—*a periadenitis* that glues and binds all the structures together in one homogeneous mass. If we get the cases rather early we can remove the diseased glands as easily by incision and enucleation as if taking a pea out of its pod.

It is not so easy to remove lipomas of the neck, because the adhesions occur in rows or lines and their removal or dissection out of the connective tissue is much more difficult. In the removal of a large number of these tumors of the neck the operation is a formidable one on account of the excessive vascularity of this region. There is an immense amount of bleeding, and we require a large number of hæmostatic forceps before undertaking the primary incision. We do not have time in these cases to ligate and stop the vessels from bleeding. If you have a diseased gland at the side of the neck, curette it, or curette those that are not suppurating, then secure the vessels with ligature, and pack the wound with iodoform gauze—with a moderately firm compress. The operation is not a particularly dangerous one, but it is slow and requires a great amount of care on the part of the surgeon.

They have been treated in various ways. I have mentioned total extirpation as the most satisfactory method in dealing with them. They have been treated by the use of iodide of potassium and iodine, cod-liver oil, syrup of hypophosphites, and improvement of the general nutrition of the patient by the application of iodine ointment. They have been further treated by injections with carbolic acid, iodine, dilute acetic acid, which has been a favorite method of treatment with some surgeons, resolution being favored by repeated injections of either a few drops of a 5-per-centum solution of carbolic acid, twice or once a week, or by the ordinary (officinal) dilute acetic acid. I have used both of these methods of treatment, and I do not remember to have absolutely cured a case by injections into the gland or its parenchyma.

PLACENTA PRÆVIA.

BY SAMUEL BELL, M. D., DETROIT, MICHIGAN.*

Experimental testimony bearing directly upon abnormal conditions in utero, during pregnancy, and the terminations of these abnormal conditions, are of great interest to the accoucheur. Among the abnormal conditions, which the obstetrician is called to relieve, there are few which the accoucheur dreads more than cases of placenta prævia. NAEGLE was probably right in saying: "There is no freak of nature to be compared with this, for the very action which she uses to bring the child into the world, is that by which she destroys both it and the mother."

The literature of the present day is not pregnant with brilliant achievements at the hands of skilled obstetricians. The mortality attending the Herodian decree has a parallel in this freak of nature—placenta prævia. The meagre statistics which are extant, on the mortality, especially of the child, scarcely bear a ray of hope to the accoucheur when called to such a case. The various theories advanced by embryologists with reference to the cause of this condition are merely hypothetical.

In the normal condition, the ovum engrafts itself in the uterine mucous membrane, in close proximity to the Fallopian tube, along which it has descended. The mucous membrane of the uterine canal having undergone certain periodical changes which assist in the engrafting or embedding of the ovum in its substance. The tumid and convoluted condition of the uterine mucous membrane, during menstruation and for some time after, is in a state which is well suited for the arrest and lodgment of the impregnated ovum; the latter already endowed with independent vitality, and in a condition to adhere to any surface where pabulum will be received for its future subsistence. While the fundus uteri may, physiologically, be considered the habitat of the fertilized ovum, exceptional circumstances may occur, which will admit of its ultimate escape. And we may infer that the arrest of the ovum may take place in the cervix; it will there make its habitat and undergo the physiological changes upon which its formation depends. Other causes may occur to assist in the gravitation of the ovum towards the cervix; ovulation and menstruation not necessarily occuring synonymously. The passage of the ovum into the uterine canal may take place relatively later than menstruation. The thickened condition of the mucous membrane during menstruation may have subsided, hence offering no impediment to the onward passage of the ovum to the cervix. The above are some of the theoretical speculations with reference to the cause of Placenta Previa. However, nothing very definite is known. Central implantation is the most formidable and disastrous to both mother and child. Lateral implantation offers Nature a chance, inasmuch as the descent of the presenting part, by its location very often acts effectually in arresting the most serious condition present, viz., hemorrhage. A case belonging to the former class, occurring in my practice recently, may be of interest, as the treatment pursued was that of

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promptness and decision, which offered the only hope for both mother and child. Oct. 1st was called to see a lady, thirty years of age, in eighth month of pregnancy, with second child, a slight hemorrhage having taken place. Digital examination revealed a closely contracted os uteri, and very meagre outlines of placenta could be distinguished, inasmuch as the uterus had not begun to dilate. Cotton kite-tail tampons were used, with strict orders as to maintaining a recumbent position. On the evening of Oct. 4th at about 1 P. M. was summoned in great haste, the messenger, her husband, stating that the blood was flowing from her in a perfect stream. Examination found os beginning to dilate. Tamponed again and gave mild anodynes; labor pains of a very weak character continued until 10 P. M. when they passed, not returning until two o'clock the next morning. At that time true labor pains began synchronously with dilatation of os uteri and alarming hemorrhage. When this serious condition of affairs exists two methods of treatment are practiced; one is to assist Nature in the complete dilatation of the os, either by the digits, tampons, or Barnes' rubber dilator, and proceed to deliver. The other is to tampon thoroughly and leave the tampon in situ until it is pushed forward by the force of the presenting part, the tampon assisting in dilatation of the os and checking hemorrhage. Although the latter method of procedure has eminent advocates, I am thoroughly convinced that had I relied upon this method of operation, I should certainly have sacrificed the lives of both mother and child. The pulse indicated a loss of a great amount of blood. Perforation of the placenta was attempted, but was not successful, as the os had not undergone sufficient dilatation. Partial separation of the placenta was also tried, but as the opening of the os took place, the central implantation rendered this act impossible. SIMPSON advocated this latter procedure, but DR. BARNES has shown that in central attachment it is impossible. In the greater number of cases, the placenta reaches higher than the meridian of the uterus, often to the fundus, and the fingers are not long enough to reach half way up towards margin of the placenta, its diameter being nine or ten inches. The period of greatest danger is when the placenta is partially separated, and tardy dilatation of the os occurs; at this time the prompt, decisive and skillful action of the accoucheur may save one or two lives, which act may be classed among the crowning triumphs of the obstetric art. The direct connection of this fœtal circulation with that of the mother, through the epigastric arteries, admits of the loss of a large amount of blood in a very short time, when a large surface of the placenta is detached. My patient was fast passing into a condition which forcibly demonstrated the importance of immediately terminating labor. Placing the anæsthetic in the hand of an assistant, semi-anæsthesia was produced, when dilatation of the os was more easily accomplished, and perforation of the placenta was successfully performed, the liquor amnii, which was scant, allowed to discharge. At this stage the mother was almost exsanguinated and passing into a state of collapse. Uterine contractions were induced, the head descended and I applied the forceps and completed delivery. The major part of placenta was easily removed on account of the efforts required for separation into hemispheres. The complete relaxation of the uterus rendered the case more ominous, as nature's last aid was lacking. At this point the instantaneous and almost marvelous effect of hot water was manifested, in inducing uterine contraction and arrest of hemorrhage.

On the third day after delivery the patient experienced a marked chill, which lasted for over an hour; her temperature rose to 104.° Notwithstanding the fact that strict antiseptic precautions were practiced consisting of intrauterine injections of 1-1000 per cent. bichloride, as often as symptoms required, and the atmosphere of room, together with all instruments and napkins brought in connection with the vulvæ rendered aseptic, inflammation of the cervix ensued, which is a frequent sequela of central implantation, rendering her recovery tedious. At this date, which is one month after confinement, the child is in a healthy condition, and mother convalescent.

The contributions to the literature of the subject during the last few years is somewhat more encouraging than the dismal records of text-books. Whether this is due to an inclination on the part of the contributors to report the most successful cases, or whether it is on account of the improved methods of treating these cases, is not readily determined. This condition is comparatively rare, obstetricians of a large practice in our metropolitan cities in a practice of twenty years not having had a dozen cases.

DYSLALIA FROM CIGARETTE SMOKING.

BY C. M. FENN, M. D., SAN DIEGO, CAL.

A peculiar type of stammering has recently come under my observation, which, in connection with its probable origin, has seemed to me worthy of record:

Mr. F., a young widower, has for several months been engineering a pump in a quartz mine. His station was about two hundred feet under ground; his watch the daylight hours, and for lack of more arduous duties he has been doing a great deal of heavy sitting and smoking. He purchased cigarettes by whole-

sale, and on his own confession has smoked as many as five hundred of them in a month, besides endeavoring at odd moments to color a meerschaum!

About six weeks before our interview he began to stammer, and now he believes the difficulty to be increasing from day to day. Yet, aside from a slight tendency to insomnia and a want of control over his speech, he has nothing to complain of. The lesion seemed to be a spasm, or want of co-ordination, of the risorius muscle of each side, which I believe is one of the *conditions* present in some forms of stammering. Each attempt at phonation was preceded by an expansive grin, as if a huge joke was impending, and was followed by sundry convulsive efforts of the upper lip to "catch on" to some of the p's and m's of conversation. Even when under full headway it was necessary to proceed with great deliberation, or "break all up." Half suspecting the real cause of his malady, he was quite ready to accede to the injunction of total abstinence in the matter of smoking. This, with the help of bromides, valerian, etc., affected him so happily that within ten days he felt safe in returning to the country, *without paying his bill.*

CLINICAL LECTURE ON RETENTION OF URINE.

BY CHRISTOPHER HEATH, F. R. C. S., LONDON.*

I propose to-day to speak of retention of urine, and it will be convenient to consider it at different ages. In the case of a new-born child there is sometimes a difficulty in passing water, which always depends upon a contracted orifice of the prepuce. When the child tries to make water it "balloons" its foreskin, swells it out, that is, into something like a child's balloon. Of course, the treatment in such a case is obvious and simple. You have only to dilate the orifice of the prepuce with a pair of forceps, or if it is at all a severe case, when the child is a little older, you had perhaps better circumcise it, and there is an end of the matter. But you sometimes meet with retention in the case of children who are a little older, and I believe that retention in children, not dependent upon a tight foreskin, is almost always the result of calculus in the urethra. A child may have a small calculus in the kidney without any obvious symptoms; he has never made any complaint, until one day you are sent for because he does not pass his water; perhaps for some hours the bladder has been distended, and there is obvious retention of urine. Now in a case of that kind always suspect a stone and look for it; usually it is easily found just within the meatus urinarius. You take a silver probe and pass it down the urethra, and you feel it click against the stone, and if the calculus is just within the meatus it is an exceedingly simple matter. You have only to get it out with a little scoop, or if you have not one, the loop of a hairpin is a convenient thing. If the orifice of the urethra is at all tight you had better nick it in order to get the stone out; but remember when you are doing this that you should always cut downwards and not upwards into the glans penis. But sometimes the stone is not at the anterior part of the urethra, but behind; and these are more difficult cases, and are apt to be overlooked. The stone does not produce complete retention perhaps, although it makes a difficulty, and then ulceration is sometimes set up, with abscess, and possibly extravasation of urine; but where there is real retention of course you can make it out by passing a probe or catheter down and touching the stone, and you may be able to feel it through the perineum. In that case it is best, if you can, to extract the stone, but it is not easy to do it. You will have to put the patient under chloroform, and with a very fine slender urethral forceps you may be able to extract the stone. More frequently the stone has become fixed, and you cannot get it out. Then the best thing is to cut upon it at once, for it is not a serious thing in children to open the urethra. You have the stone to guide you, and it is much better that you should once cut upon it and take the stone out than leave it there to set up, as it certainly will do, irritation, and possibly, as I have said, abscess and extravasation of urine. Besides, if it is a case of *bonâ fide* retention, the child cannot be left many hours without being relieved.

Then there is one other thing in the case of children that should always be borne in mind; that the child may have tied a string or thread round the penis. Such cases are met with every now and then. Two or three years ago a child was brought one morning to my consulting room with the glans penis hanging merely by a thread of cellular tissue. It was as nearly cut off as it could be, but not absolutely. I simply took a pair of scissors, cut the remaining thread, and took it off. Round the glans penis just where it had been divided there was a long hair; and whether that hair had cut it through, I cannot tell. The child utterly denied ever having had a thread tied round it, but it is just conceivable that a long hair might have been twisted round accidentally, and have cut its way through.

Whenever a child has a swollen penis which is not clearly a case of paraphimosis, you should ascertain whether there is a thread deeply embedded in the groove, which is formed by the swollen tissues all round.

Now let me pass on to a much more import

*The British Medical Journal.

ant matter, the retention of urine in adult age. With young adults, I suppose the most common cause of retention is some mischief supervening upon gonorrhœa. People who have perfectly healthy urethras do not get retention of urine. It is only after they had gonorrhœa or some mischief about the urethra that they are liable to attacks of this sort. Sometimes you find a patient with retention of urine during gonorrhœa, or at all events in the latter stage of it; and if that is the case, it is more usually due to some inflammation travelling to the prostate. The prostate becomes swollen and tender; if you put your finger into the rectum, you will feel it there; and it is because of that swelling of the prostate that the man cannot pass water. The obvious thing in such a case is to pass a catheter for him very gently through the prostate, and draw the water off. You proceed to treat the prostatic inflammation by a leech or two to the perineum, and then the swelling generally subsides, but it may, of course, run on to an abscess. And remember that these cases of acute prostatitis in young men are more apt to run on into abscess than any other form of prostatic disease. Then the latter stage, after the gonorrhœa, is perhaps the more critical time for the urethra as regards retention. What happens is this. The man during the gonorrhœa has been debarred from all liquor, and then, assuming that he is well, he perhaps takes more than he should do. In hospital practice and amongst the lower classes you will meet with that kind of case much more frequently than in private practice. The better class of people do not, as a rule, drink more than is good for them; they do not indulge in that sort of debauch, but a laboring man is apt to take more liquor than is good for him after abstaining for a few weeks, and then he gets retention of urine.

Now that form of retention is by some surgeons thought to be purely spasmodic, others call it inflammatory. I believe it is really a little of both. If it is not inflammatory, it is congestive certainly, and there is a certain amount of spasm mixed with it. Therefore, whether we call it congestive retention or spasmodic retention, we mean the same thing. At all events, clinically, you find a patient who has had gonorrhœa, and apparently recovered from it, who is unable to pass his urine. Sometimes such patients on go for many hours before they knock up the house-surgeon, so that at one or two o'clock in the morning you are called upon to relieve such a patient, and, of course, it is important that relief should be given at once. Now it is quite true that these cases will mostly get well of themselves, if you can have time. I mean, if you give a patient of that class a good dose of opium, put him into a warm bed, and put fomentations about his perineum, in the majority of cases the retention will pass off, and the patient will make water. But you must bear in mind the circumstances of the case. If it is a hospital patient, the house-surgeon is called up in the night, and naturally he wants to get to bed again. There are no great conveniences for putting the patient into a hot bed, or even into a hot bath, in the middle of the night, and you have to pass a catheter for him; and, as SIR HENRY THOMPSON says in one of his lectures, no doubt the patient appreciates your skill, if you pass a catheter without hurting him, and draw his urine off, more than if you merely gave him a dose of medicine, put him into a warm bath, and let Nature do the rest. It is better, then, on the whole, to draw off the urine at once. The great thing is to use a good-sized catheter. These patients have no stricture, and you want a good-sized catheter; and of all catheters, commend me to the old-fashioned English gum-elastic catheter. If you take a catheter of the size I hold in my hand (No. 9), with a good blunt end to it, and if you warm it and oil it well, and pass it, with a stilette if you like or without, until you get to the obstruction point, you will find it generally somewhere about the bulb of the urethra; and then, if with a little gentle pressure you push against it, you will be conscious of a sort of yielding; and so, as you steadily push on, the catheter goes into the bladder, and you draw the water off. That, of course, is an extremely satisfactory thing for all parties; but the affair does not always come off as smoothly as that. You may find a difficulty in the way. Possibly there may be more congestion than you think, more spasm perhaps, and the obstruction does not yield quite so readily. Now the greatest mistake that you can make, I believe, is to use very small catheters. No. 7 is a very good average size, and, if you cannot get that in, the patient having no history of previous stricture, you had better put the patient under chloroform, and you will be able to pass the catheter with the greatest ease. It is much better for the patient that you should stick to that catheter or thereabouts than that you should poke holes in his urethra with a small instrument: and, if you give the patient chloroform, you overcome the difficulty at once. I am aware that, when you get into practice in the country, you may have to modify your proceeding. When a medical man is on his rounds and is stopped somewhere because a patient has retention of urine, he may not have chloroform with him, and perhaps not a catheter. Those are the cases in which you may fall back upon opium, with warm fomentations. If you give a patient of that kind a good dose of opium, and have fomentations put about the perineum, the probability is that in a couple of hours he will be able to make water. If he does not, then of course he will send for you, and you must be

prepared to pass a catheter and draw the water off. I want you to understand that the case may be treated in two ways, and that it is really a matter of convenience which method you should adopt.

These are cases of spasmodic or congestive retention; it is a much more serious matter when you have a patient who has a tight organic stricture. The patient has perhaps had a stricture for years past, and he has been treated two or three times by different surgeons. People get very callous and careless about their urethras, and neglect themselves, and in that way the stricture gets tighter and tighter until at last some day, or more probably some night, the patient finds that he cannot make water at all, and then he sends for you to give him relief. These are confessedly very difficult cases to treat. You do not know anything previously about the man, you do not know the condition of the urethra, you have merely his story to guide you; do not, therefore, be deceived by what he tells you; do not begin at once with very small catheters, but always with a fair average size. For that purpose I do not know that you can do better than use the French instruments, the olivary catheters, beginning with a medium-sized catheter just to find out how the land lies. You pass that steadily down the urethra until it is stopped; then you carefully make a little pressure and try and get it through. If you find that it is of no use you abandon the attempt, and you steadly try one instrument after another until you get the very smallest. I quite allow that with care and skill—it requires a very considerable amount of skill—you may insinuate through the stricture such a very small catheter as this which I hold in my hand, a catheter equal to about No. 0 on the English scale (it is No. 1 on the French scale), the smallest catheter I think in use. You may not succeed, and then you must have recourse to silver instruments. I know that silver instruments are not in fashion at the present time. Some surgeons hardly ever use them, but I think you ought to be able to use silver instruments, and that you may use them quite as safely as the soft one. I presume, therefore, that having failed with these soft instruments, you try a silver one, Nos. 3, 2, or 1, or No. 0 if have it, and do your very best to get it in. And let me say, without wishing to urge any violence whatever, that you must bear in mind that in these hard strictures you must use a little steady pressure, but no force, and you must be careful that the catheter does not suddenly slip from your fingers, and make a long false passage.

Then having tried all you know in the way of catheters, you put the patient under chloroform, and that for this reason: in all these cases of retention there is a certain amount of spasm; and if you overcome that spasm by chloroform, you get the catheter in more easily than you can do without it. Of course there is the mechanical obstruction, but tnere is a certain amount of spasm with it. When the patient is under chloroform he is necessarily recumbent, and then you have the advantage of putting your finger into the rectum, and seeing that yovr catheter is not in a false passage; you can feel it going in the proper direction, and perhaps assist it a little in passing in. Now if you have a case of that kind, and everything has been done in the way of catheterizing that is possible, and yet the patient is not relieved, the bladder is nearly or half way up to the umbilicus, and the patient is in considerable distress. It is clear that the patient cannot be left, because, if he is, there will be a risk of the urethra giving way at some point, and possibly of the bladder giving way, but that is, of course, an extremely rare occurrence. Therefore it resolves itself into what is the safest thing to be done in the case of retention of urine with an impassable stricture. I have no hesitation in saying that the safest thing is to aspirate the bladder above the pubes, and you cannot well go wrong is the aspirator is in proper order, with a clean needle, which you take every precaution to make aseptic, carefully carbolizing the whole machinery, and washing the skin of the abdomen with carbolic acid, then puncturing a little way above the pnbes. The operation seems to be attended with as little risk as possible. Yet, a year or two ago, there was a paper read at one of the medical societies by an eminent surgeon, in which he endeavored to show that this operation was not free from risk. The point was this: that if you let out putrid urine in that way, it was possible that you might get some of the urine into the cellular tissue about the pelvis, and mischief might occur. I think he was quite right; it is quite conceivable; but fortunately in these cases of retention, the urine is not putrid; it is usually a case in which the urine is fairly healthy, and, therefore, you may hope that, in the majority of cases, you will not run much risk in aspirating the bladder above the pubes. At all events, I recommend you to do that rather than any serious operation.

But, naturally, aspiration is only a temporary arrangement. You would not think of keeping the aspirator needle in. You merely draw off the urine, and then hope that the difficulty may be overcome in other ways. When you have aspirated once or twice, it might be better to puncture above the pubes with an ordinary trocar and cannula somewhat curved, leaving the cannula in (there is a cannula made on purpose). Patients may no doubt go on for years making water in that way through a permanent opening above the pubes. On the other

hand, if you do not choose to adopt that method, there is the much older plan of puncturing through the rectum. There are disadvantages in that, and I think that surgeons generally have given it up. It is still used at Guy's Hospital, I believe; because Mr. Cock, formerly surgeon there, specially advocated it, but I do not think that that method is often adopted elsewhere. The objection to puncturing by the rectum is this. In the first place, it is inconvenient to keep a tube in the rectum, and in the next place there is a risk of wounding the peritoneum. The peritoneum is not always so high as it ought to be. Sometimes it comes lower down to the prostate than you would expect, and, under those circumstances, if you puncture it, you are sure to get peritonitis. Then, again, it is possible that a little urine may get out, and then you may get cellulitis about the pelvis. So that there are several drawbacks, and altogether the operation is, I think, practically superseded by the other proceeding.

If a man has a tight stricture in the perineum which is impassable, and if he has also retention of urine, of course it becomes a question whether you would not be wise, under some circumstances, to operate in the perineum and divide the stricture, and, at the same time, relieve the retention. I quite allow that, under favorable circumstances, that is, perhaps, the best proceeding. I mean, of course, where you have plenty of assistance, plenty of good light, and every convenience for an operation such as we have in hospital practice. In such a case an operation in the perineum is perfectly justifiable, and is sometimes better than anything else. But under the circumstances that many of you will have to deal with, where the patient is entirely isolated, and where you have no conveniences and no assistance, I should strongly advise you not to attempt any perineal operation. It is always a difficult proceeding, and sometimes it is an extremely arduous operation to perform.

Now, if you elect to do any perineal operation in case of retention of the urine, I should strongly recommend you to do Wheelhouse's perineal section, which is, in fact, the only operation that would be performed at the present day. Let me point out shortly what the operation is before I go on to other matters. You take a staff, like that which I hold in my hand, with a little knob at the end, and you pass it down to the obstruction, which is, of course, usually about the bulb. The patient is then tied up in the lithotomy position, and the surgeon opens the urethra quite in front of the stricture, presumably a healthy portion of the urethra. Having opened it upon the groove, the assistant turns the instrument round, and hooks it up so as to draw up the urethra a little, and with two pairs of forceps the urethra is held open on each side. Having exposed the interior of the urethra the operator has to find the orifice, which is, of course, exceedingly small. He takes a probe-pointed director, and, having passed the probe through the stricture, he pushes the director portion a little on into it, and with a bistoury he divides it. Then, still keeping the groove there, he passes a gorget into the stricture and along the urethra, and so guides the catheter through the whole length of the urethra, and in that way into the bladder.

And now I come to the last type of retention, at the other extremity of life—in old age; and let me say that this is a class of cases that you are likely to meet with in private practice. Old people get retention of urine, not because they have enlarged prostates merely, for many men have enlarged prostates after sixty, and plenty of them go through life afterwards without having retention of urine. The reason why they have retention is because they get congestion of a large prostate, arising generally from exposure to cold. What happens is this: an elderly gentleman, who has been wearing thick clothes all the day, dresses in the evening to go out to dinner, and puts on a very much thinner pair of trowsers. Without the slightest reflection upon his appetite in any sense whatever, he is exposed to cold and gets congestion of the prostate. It is very uncharitable to say that all these elderly people have taken more wine than is good for them, or anything of the kind; it is not the fact. Perfectly reasonable and sober persons get retention simply from exposure to cold. They find, when they go to bed, that they are not able to make water; they go on trying, perhaps, to make water at intervals during the night, and late at night or early in the morning you are sent for, to find an elderly gentleman in considerable distress because he cannot relieve his bladder. Such a case as that of course requires a little careful management; but, after all, it is not a very desperate case to treat, unless, unfortunately, the old gentleman has been trying to pass a catheter for himself. The cases that give trouble are where you find that the patient has been making false passages with his own catheter. Some time or other, probably, he has been provided with a catheter, and then, getting retention of urine, he tries to use it, and he makes himself bleed. In such a case you may have a good deal of trouble; but, fortunately, in the great majority of cases no catheter has been used when you are first called in. In going to a case of that kind, of course you provide yourself with suitable instruments. You want an ordinary English catheter of good size, No. 9 or 10. A soft india-rubber catheter is also a very useful thing; and then there are the elbowed or *coudé* French cathe-

ters, such as the one you see here. Usually, with one or other of those instruments you can overcome the difficulty if you only go to work quietly and steadily, giving your catheter a good curve, and slipping it down until you come to some obstruction, then gently pressing against it till the catheter goes in. I think that the old-fashioned English catheter without a wire is the best instrument, but the fashion rather runs on these *coudés*.

Occasionally there are great difficulties. The third lobe of the prostate rises up in the floor of the urethra, and makes it exceedingly difficult to get into the bladder, and in these cases you may sometimes advantageously push the catheter in as far as it will go with the wire in it, and then withdraw the wire and push the catheter on a little further, and softened as it is by the heat of the urethra, it finds its way in. Of course you must bear in mind that the projection of the prostate may be on one side, and that is one great reason why you cannot put the catheter straight in; but you must let it fit itself, as it were, to the urethra, and gradually find its way into the bladder. However, with care, I believe that all these cases are to be successfully treated. You may be obliged to have recourse to a silver instrument; it is better not to do so if you can help it, but anything is better than leaving the patient unrelieved; and the large, well-curved silver catheter is a very useful instrument in such cases. The size I prefer is about No. 10, and you want a good long-curved catheter in these cases. Sometimes where the other catheters have been tried and failed you can pass a catheter like that without any difficulty, if you will only keep along the roof of the urethra.

Now, in such a case of retention, supposing that you have drawn the water, what kind of urine will you expect to see coming through the catheter? It is always more or less bloody from the congestion of the prostate. Patients are apt to be alarmed by this, but you need not be, for it is just one of the ways by which Nature relieves the congestion of the parts, and the urine will be bloody for some few days, and then gradually will clear off, and the patient will recover his usual habits. It is also well to bear in mind that these patients do not at once recover the use of the bladder, they cannot micturate for some days. The time varies in different cases, but it is not at all uncommon to find a patient who has had a bout of prostatic retention, going on for a fortnight or three weeks before he can thoroughly make water for himself. It is always well to know that, so as to be able to warn the patient's friends that you will have to come and draw the water for him for a few days until he recovers entirely the power over the bladder.

I have now given you all the varieties of retention in the male, from the baby to the old man. Let me say a word about retention in the female, which does occur from time to time as the result of some displacement of the uterus —the tilting backwards of the unimpregnated uterus, or possibly of the impregnated uterus, or may result from the natural changes of pregnancy. In the later weeks or days of pregnancy, when the uterus is pressing considerably upon the neck of the bladder, one can easily understand how it produces retention of urine. I simply mention it here because it is just one of those things that are apt to be overlooked. A woman makes a certain amount of water, but the bladder is more or less distended, and therefore, when you are called in to attend a labor, always ascertain whether the bladder is empty or not. I suppose there are no more unfortunate cases than those where a child's head has been allowed to press upon a full bladder, for those are the miserable cases where you have ulceration and consequent vesico-vaginal fistula. If you always pass a catheter or see that the bladder is empty in every case of labor, you will hardly ever have such a thing as vesico-vaginal fistula.

There is another class of cases of female retention which should not be treated with the catheter: that is the hysterical. Young women sometimes cannot or will not micturate, and it is a mistake to use the catheter if you can avoid it. Every now and then you are obliged to use the catheter, but it should not be used if it can be avoided, because you can really treat those cases more satisfactorily without it. The great thing is to put the treatment in the hands of a judicious matron. Let her put the patient into a bath of warm water, and then, without giving her notice, throw a bucket of cold water over her back and shoulders. The sudden shock from the cold water over the trunk will produce a violent expiratory effort, which will overcome the already relaxed muscular fibres of the sphincter vesicæ, so that the urine passes, and there is an end of the difficulty.

Correspondence.

DRUGGISTS VS. PHYSICIANS.

The articles lately appearing in the AGE under the above caption are worthy the consideration of every physician who is not practicing medicine merely for the fun (?) there is in it, or for the benefit of his friend, (?) the druggist.

There can be little doubt that the average physician, as a rule, does himself and his profession a great financial damage by writing prescriptions. Experience of many years has

taught the practitioner that when he writes a prescription and places it in the hands of his patient it is very likely to become public property. The druggist fills it, numbers it, numbers the bottle containing the medicine, and then carefully files it away for future reference. If the patient asks for a copy of the prescription he is very likely to get it, and ere long half the females in the neighborhood own a copy of the prescription and it is filled and refilled, many, many times, the physician receiving no benefit whatever, but the druggist always making a handsome profit.

How often has it happened to every physician that with a difficult chronic case on hand. he has spent days in hard study and spent money for new books in order to obtain the knowledge necessary to master the malady and then sum up the whole of his knowledge into a prescription for which he probably receives one dollar; this prescription is carried to the druggist's, it does good work and is refilled time and again, the patient is cured, the doctor has gotten one dollar, the druggist probably a dozen of them, and he and half the community become possessors of the knowledge necessary to cure similar cases in the future.

We know it is rulable among druggists not to refill a prescription without orders from the doctor. But even if the druggist is faithful to this rule it is of little financial benefit to the physician. The patient returns and reports that all is going well, that he is recovering and both patient and doctor see that all that is necessary is a continuation of the previous prescription, and of course it is ordered refilled. Nine times out of ten the doctor gets nothing for this, while the druggist again reaps his profits. Had the physician furnished the medicines he could then again refill his prescription and again and many times in the future realize a profit, besides the knowledge gained by so much hard study and experience would be in his own possession. We think physicians should be very careful about writing prescriptions which they have found particularly useful in chronic cases, otherwise they will soon find that the druggist is treating the same disease with the same prescription. Experience has taught us that, as a rule, the druggist cannot be trusted to treat the physician who favors him with his patronage, fairly, and since that is the case it behooves the doctor not to place himself in his power.

Again, we never have been able to understand why a physician's prescription should be so carefully filed away by the druggist. Why should it not be returned to the doctor after a few days, or as soon as the medicine has been used? That would be long enough to protect the druggist from the charge that he had made any mistake in filling it. Any druggist who has no intention to use the prescription in the future would be willing to make this disposition of prescriptions.

We presume to say that there are few doctors who really know how much money is taken out of their business by patent medicines. There is hardly a disease which has not its patent medicine, and the druggist reaps a good harvest every week from their sale. Now, we believe that the great bulk of patent medicines are frauds, manufactured by quacks who cannot make a living where they are known. But the public, through the efforts of the druggist, have come to desire them, and, since such is the case, let the physician meet the facts just as they are. If these nostrums are as necessary to the well-being of mankind as those who handle them pretend, let us, the guardians of the people's health, see that the people get them. Let us place upon our shelves the valuable articles and give the people and ourselves the benefit of them. After the town has been flooded by literature telling the people how necessary a certain patent medicine is to them, let us quietly inform the public, through the columns of the local paper, that, while we believe the stuff to be a fraud, yet, if they want it, it can be had at from 10 to 25 per cent. less than the druggist, who pretends to have such great confidence in its efficacy, will sell it. This, we believe, would do more to suppress patent medicines than anything else, and would besides put the profits in the hands of the physician.

The law compels the physicians to prepare themselves for the practice of their high and responsible calling, yet it makes no provision for protecting them after they have fulfilled the requirements of the law. In Russia all patent medicines, save a very few, are prohibited by law, and so it should be here; but since such is not the case, let physicians retain in their own hands the profits which legitimately belong to them, and not allow them to be grasped by the druggist, even if it is necessary for him to handle the stuff. No doubt many physicians will be somewhat surprised by this bold proposition, but a bold step is needed at present, and if the enterprising druggist finds that the doctor can sell patent medicines at prices ruinous to him, and can besides fill his own prescriptions, it may be that he will still realize that the M. D. has not yet become subordinate to his former assistant. The druggist does not advertise the goods because he believes in them, but because of the huge profit arising from their sale. If he finds he is only advertising a drug which the doctor can well afford to undersell him on, the advertising will cease and patent medicines will pass out of sight. Let us doctors for once be selfish enough to work for the best interest of ourselves and our families.

A. B. C.

The communication from X. Y. Z., followed by U. V. W., awakens a desire within me to say a few words on that subject. I have been a close reader of the MEDICAL AGE since early in 1884, and read with much interest the discussion of "Physicians' Fees," and now that it seems to have been laid aside and this subject taken up, I hope that we may profit by this if not by the other. I have quietly submitted to the abuse of druggists in the prescribing line thinking probably it has always been so, but, however, if it has it is time to call a halt.

In this state we are required to procure license to pursue our professional calling, and if we don't we are subjecting ourselves to the penalty of the law. Only last June the State Board of Health of this State (Indiana) issued orders to the various county boards to prosecute all persons who prescribed medicine without license so to do. I have seen no difference since, nor have I heard of a single prosecution. On several occasions I have been asked for a little counsel by a druggist in regard to his family, as most of them seem to think us in duty bound to them as to our brethren, and quite recently, in a case of inter-costal neuralgia in his wife, the druggist applied to me for something, saying he did not want to use morphine or opiates, and I took from my shelf some menthol, as he had none, and gave to him, telling him how to use it in some alcohol, clove oil, and a little ol. capsicum, and then use it as a liniment, etc., giving further directions. He came in the next day, saying that was the best pain-killer he ever saw. He accordingly laid in a stock and now supplies the trade when anything of the kind is needed. On another occasion I recommended a bottle of syr. roborans, and ordered it through him, and the trade is now supplied in every like case that comes up.

Now as far as practical knowledge of medicine is concerned, these druggists know nothing at all further than reading a few labels and filling prescriptions in a way so careless that we could (if we would treat them as they do us) blow them up every day in the week and several times on Sunday with spurious prescriptions. Their knowledge is similar to that of the student who told the professor when asked how he would treat a case of post partum hemorrhage, said he would tie the post partum artery.

Now, in absence of legislation on druggists and when the name drug store means saloon in most all of our villages and small towns, can't we hope for something in the way of legislation, and use our influence to achieve it. Can't we turn our backs upon proprietary compounds that are pretended for physicians' use and yet labelled and recommended to every person from a babe to an old man in his dotage?

We belong to a profession that is of high calling, and are we not stooping very low when we append our signatures to Peacock's Bromides, Castoria, etc., when those very means are used to secure the sale of such drugs on every shelf of the land with our endorsement. Brethren can we not remedy the matter very easily by supplying our own drugs at a close margin and of a chemist who is thoroughly reliable, then make our diagnosis on a thorough knowledge of anatomy and physiology and direct our treatment accordingly.

It would seem from the amount of labelling on some of our notorious medicines that the Dr. has no knowledge of drugs whatever and they take that occasion to inform him of the good accomplished by their medicines which is being endorsed by eminent medical men everywhere. Just as long as we are led in this manner, and throw our prescriptions recklessly to every one-horse druggist, we may expect to fare as we have in the past. A man that devotes himself to study, as we all should, seldom finds it necessary to leave the mat. med. and go out after proprietary compounds, and never after a patent medicine or one whose composition is not thoroughly made known.

R. S. T.

THE TREATMENT OF ANÆMIA.

DR. MALONE, of Brooklyn, New York, in speaking about the treatment of disease, says: "I depend chiefly upon rest and food, and find I am more successful." DR. JOE GALLAGHER says: "Therapeutics is a humbug. In the hospital patients seem to recover just as quickly without drugs as with them." DR. WILLIAMS, of Bay City, Mich., writes: "I fail to see the use of large doses of iron, since we get iron enough in our food to supply nature." Verily it needs a modern Moses to lead the medical brotherhood out of the wilderness of doubt. Were physicians given to stop prescribing methinks patients would be few. When people get sick a doctor is usually called in and if he fails to leave the usual nauseating mixture, next time some one who will leave such mixture will be called. We don't pay a doctor for his opinion, but for the time and skill needed to write a prescription.

Let us all then humor the patient and follow custom.

Give drugs and in plenty, and make them as nasty as possible, for "the world is our oyster and verily we must open it."

DR. WILLIAMS JOSH BILLINGS says: "It's a good deal better to know nothing than something that aint so."

L. GALVANI DOANE, M.D.

NEW YORK CITY.

PICHI IN VESICAL TROUBLES.

I desire to add my testimony to the marked benefit derived from the use of the fluid extract of pichi in painful bladder affections. My patient, aged 77 years, after being seriously ill for several weeks, had an abscess in the perineum. After the abscess was opened he experienced intense scalding pain after micturition which lasted for some time. The urine was rather scanty and contained considerable stringy mucus. I gave camphor and opium pills, a mixture of liq. potas., æth. spt. nit., tinct. hyoscyami with infusion of pariera brava, applied hot poultices and carried out the ordinary routine in such cases for two or three days; but with no good effect. The patient described his pain as if scalding water was passing over the part, and he could get no rest without taking the opium pills frequently. On Friday night I prescribed the fluid extract of pichi (P., D. & Co.'s) in one-third of a teaspoonful dose every four hours, and stopped the other medicines.

On my visit on Saturday morning I found my patient virtually well, as far as the painful micturition was concerned. He said the pain was so slight that he scarcely felt it when making water. There has been no return of the pain, and recovery is taking place satisfactorily. In this case there can be no doubt that the pichi was the cause of the amelioration of the distressing strangury, and that in fluid extract of pichi we have a more powerful remedial agent acting with wonderful promptness where indicated.

J. W. Clemesch, M. D.

Port Hope, Ont.

SALICYLATE OF SODIUM IN TONSILLITIS.

In the Age of May 25th is an article copied from the Practitioner of April '88, in which the writer claimed priority in the use of salicylate of sodium as a remedy in tonsillitis. For several years I have used this remedy, having seen it noticed in some journal at least ten years ago. I use the following:

℞ Acidi salicylici, ʒ ij.
Sodium bicarb., C. P., ʒ iss.s
Glycerini. ʒ i.
Aquæ menth. pip., ʒ iij.

M. Sig.—Tablespoonful every two or three hours.

When used in time and faithfully followed, I have never known a case to go on to suppuration.

I generally prefer calomel as a cathartic in this complaint.

Jno. E. West, M. D.

St Clairsville, Ohio.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., NOV. 10, 1888.

Editorial.

THE PHONOGRAPH AND ITS APPLICATIONS IN MEDICINE.

Perhaps the most remarkable of the many electrical appliances which Edison has devised is the phonograph. Regarded in its incipiency as a toy, it has been gradually improved and perfected until at the present time Edison himself has given it the name of the "perfect phonograph," and it would take the imagination of a Jules Verne to picture its manifold applications.

Doubtless, our readers are already in the main familiar with its operation and it will not be necessary to a thorough comprehension of its varied utility to describe it in detail here.* It will suffice to say in untechnical terms that it consists of a cylinder upon which a film of wax receives the impression of all sounds to which it is exposed, and which on proper adjustment will perfectly reproduce these sounds with not an intonation or expression lost.

The practical application of such an instrument can not all at once be realized. There seems no limit to its use for reproducing and keeping indefinitely a permanent record of every sound to which it is exposed. Already it has in many offices been substituted for the stenographer, whose occupation must in time give place to this instrument, which does its work with absolute accuracy and at a cost with which flesh and blood can not compete. The wax blanks which receive the sounds may be taken off the cylinder, sent to any point desired and whatever they have received be reproduced with the aid of another phonograph. They may be filed for future reference or may be multiplied to any desired amount from a single talking, mailed anywhere and with the aid of another phonograph made to reimpart the talk.

Edison in a report published in the Phonographic World, June, 1888, p. 210, states that the phonograph cylinder can now be put at the telephone and made to talk by wire. It can

* For detailed description of Edison's phonograph see Phonographic World, Feb., 1888.

record books which the blind can hear, can teach lessons in pronunciation or anything to be memorized without the presence of a teacher, can produce brilliant repetitions of music, not only solos but choruses, deliver a lecture, a sermon, or a political harrangue. Fancy the relief of the bashful swain who can now pour out his impassioned heart in soul convincing sincerity into the ears of his inamorata, without the embarrassments of a personal interview!

To medical readers its most interesting application will be in physical diagnosis in determining and accurately recording for reproduction at will, the sounds of the respiratory and circulatory apparatus. In another column we publish an article on this subject, entitled "The Phonograph in Physical Diagnosis," by DR. J. MOUNT BLEYER, of New York, which appeared in the Electrical Review Supplement for Oct. 27th, 1888, p. 8. DR. BLEYER has been experimenting with the phonograph for ten years past, or since its first introduction by EDISON. As a result of his experiments he says: "I must say that I predict a great future for it, and the opening of a new field for investigation in physical diagnosis and teaching." Some of the future applications of the phonograph in medicine may be:

1. For recording the physical sounds heard from day to day, and thereby being able to make comparisons. This will be found valuable in consultations.

2. To keep a record of cases. No need of an assistant any longer to take the history of each patient; the physician may himself elicit and the phonograph record for future reference, every fact bearing on diagnosis and treatment, the medicine prescribed, the advice suggested, the symptoms noted, and thus have a record of the case which would be invaluable as an aid to treatment and which he could without trouble have taken down by a typewriter for reproduction in lectures or published articles. How much invaluable practical experience that now never sees the light could thus be furnished for the benefit of medicine and humanity, and how much more rapidly the science and art of medicine would progress under this stimulus!

3. By the aid of the phonograph, instead of studying physical sounds from a book, cabinets with cylinders containing all the physical sounds, normal and abnormal, of the heart and lungs could be used to communicate these sounds at will.

4. DR. BLEYER also suggests that, as all ears have not the same power of hearing, the phonograph could be employed as an instrument for the standard of hearing the physical sounds. For instance, if in consultation there exists a controversy in regard to the character of the physical sounds as heard by the different physicians, the phonograph would settle the question beyond dispute. It occurs to us also that it would be of great service in diagnosing stone in the bladder, and there are doubtless many applications of this wonderful invention which will suggest themselves to physicians. It is not too much to expect that it will revolutionize some forms of medical teaching, and the day will come that medical colleges and teachers, if not, indeed, the rank and file of the profession, will regard the phonograph as an indispensable aid to practice. The world moves, and with it is developed more scientific methods of practicing the art of Hippocrates.

THE PREVENTION OF CONCEPTION.

This question, of periodical recurrence, is again receiving attention in communications to medical journals which, doubtless, are convinced that some good may come from the lending of their columns to its discussion. Certainly there is no question of more perennial interest, for the practice of interposing artificial means for the prevention of the legitimate consequence of the physiological act of copulation, is fixed andwell nigh universal in the more enlightened of the modern civilizations. With the advancement of woman from the condition in which she is held among barbarous and semi-barbarous peoples, the burdens of maternity grow, *pari passu*, more irksome. As a result the more refined American women have become exceedingly non-productive in the matter of offspring. And there are those, among medical men, too, who commend them for their success as non-bearers. A writer (DR. POPE, of Texas) in the (Philadelphia) Medical and Surgical Reporter, of the 27th ult., is one of these. He suggests an amendment to the Divine plan, and holds that the world would be better and our people happier if the child-bearing period of woman began at twenty-two and ended at thirty. He "cannot think that the Creator intended that woman—the best and fairest part of His handiwork—should become a mere machine for the propagation of the species." But whether it was His intention or not, the fact remains that the woman does propagate apace when in a state of nature. DR. POPE knows this right well and hence his suggestion of the abridgement of the child-bearing period. He has, however, very little confidence in the acceptance of his proposed amendment, and, consequently, goes on to suggest artificial means through which the real intentions of the Creator may be carried out. He declares, furthermore, that "there is no law, human or divine, written or unwritten, that forbids the prevention of conception when any valid reason for the prevention exists," and in this, he affirms, he is speaking "of persons lawfully bound together in wedlock." Among the reasons which he regards as valid is the limited

income of the man of the large family. He figures it out that the number of children which a man may permit to be born to him should be his income, minus the cost of keeping himself and wife, divided by 400. For instance, it costs a man and his wife $600 a year to live. Should his income not be more than this sum, he must not propagate. When, however, he has reached $1,000 a year, he may have one child, and with each $400 added to his gross annual income, he may permit his "machine for propagating the species" to turn out a child. The inability to meet these demands is a "valid reason" for the prevention of conception. Among the means which have been devised to thus prevent, this Texan adviser of the Creator gives his preference to the act of Onan, and he goes on to argue that Onan was not killed because of this act, *per se*.

This is a synopsis of an article admitted to a reputable and leading medical journal, and its appearance has not called forth any unfavorable comment. Does it require any further argument to prove that the ideas which it proclaims are of very general prevalence? We believe that the writer voices a very wide-spread sentiment. Is this sentiment a healthy one, and one whose growth should be fostered? MATTHEW ARNOLD declared that the French were given over to the worship of the great Goddess Lubricity. The result is that France alone among the great nations is declining in population, and has thus commenced to wane as a nation. With nothing more than the example of that unfortunate people before us, is it proper that the medical profession should lend the great weight of its endorsement to the introduction of the devices of the brothel into the homes of "persons lawfully bound together in wedlock?"

THE DEATH OF ELKANAH WILLIAMS—THE FATHER OF SPECIALISM IN AMERICA.

DR. ELKANAH WILLIAMS, of Cincinnati, Ohio, was born in Lawrence County, Indiana, December, 19, 1822, and died of apoplexy at Pittsburgh, Pa., October 5th, 1888. The St. Louis Medical and Surgical Journal gives an interesting necrological notice of him, which contains some statements of facts with which the profession are not generally familiar. DR. WILLIAMS, after being graduated from the Louisville Medical College, settled in his native county in the capacity of general practitioner. During his college life a fast friendship was established between him and the late SAMUEL D. GROSS, who was one of his teachers. Yielding to DR. GROSS' persuasion, DR. WILLIAMS relinquished his country practice after a short time and removed to Cincinnati, where he proceeded to *wait* for a practice. His experience in waiting was not of the encouraging kind. At the end of twelve months he found that he had earned just five dollars, and this he was unable to collect This experience led him to determine on a new departure, and he accordingly resolved to devote himself exclusively to the treatment of the eye—thus becoming the first distinctive ophthalmologist, and, indeed, the first specialist of any kind in this country. This was in 1852. He spent several years in France and Germany, giving his time to the study of his specialty, chiefly under the tutorship of ARLT and VON GRAEFE. It was while he was thus engaged that HELMHOLTZ discovered the ophthalmoscope, and DR. WILLIAMS familiarized himself thoroughly with the instrument. Leaving the continent he took with him an ophthalmoscope to London, where he instructed such men as BOWMAN, CRITCHETT and MACKENZIE in its use. He returned to Cincinnati in 1855, fully equipped for his life work, but even then it was a long time before his new departure was a financial success. It was, indeed, not until after the war broke out that his services came into demand at all commensurate with his ability to respond. The amount of work which he subsequently performed was little short of marvelous. For years he had a practical monopoly of the eye practice of the South and West.

At the close of the late war DR. WILLIAMS and several medical friends revived and reorganized the Miami Medical College, in which he took the chair of Ophthalmology—the first special professorship ever established in America. He was an exceptionally brilliant lecturer, his wit, too, being of the keenest and most fun-provoking pattern. He was unexcelled as a story-teller, and was the most jovial of companions.

Notes.

The Boston Medical and Surgical Journal, from which an extract was quoted by The Medical Record bearing on the composition of several artificial foods, publishes a correction based upon the analyses of PROFESSORS ELWYN WALLER and A. A. BRENEMAN regarding REED & CANRICK'S soluble food, to the effect that 38.26 per cent. of the albuminoids which it contains are in soluble form, that no 'hard unchanged particles of casein' were found, that the casein is partially rendered soluble by the action of the digestive ferment. That the proportion of albuminoids in Liquid Peptonoids is limited only by the quantity which can be kept unchanged in solution, that sixteen per cent. of alcohol is necessary to prevent decomposition of the albuminoids, and that no greater than three per cent. of these can be held in solution in this liquid. We

publish the correction from the same source as the original quotation as an act of justice to all concerned, regretting that we, in common with our Boston contemporary, were in any manner misled by what appeared to be a well-authenticated official report."

The following is an old story revamped, the lady having recalled the remark of the late SIR JAMES Y. SIMPSON in reply to the objections to the use of chloroform in labor. A French priest, MONSIGNOR HUGUES LE ROUX, having been appealed to by a woman soon to become a mother, gave the following advice: "Remember the text, 'I will multiply thy sorrow and thy conception; in sorrow thou shalt bring forth children.' Child-bearing is a moral as well as a physical phenomenon. The griefs of the soul consequent upon maternity do not cease with the birth of the child, and for them medicine can never find a remedy." Another woman on reading this story, which was published in Le Temps, replied: "There was but one man ever confined, and he but once in his life—and he was put to sleep. Reopen your scriptures, I pray you, and you will find that when Adam was about to be delivered of Eve, God himself executed the operation and placed our ancestor in a deep sleep as a preliminary."

Hereafter the operation for circumcision among the Jews of Berlin will be performed by physicians only, the Israelite community of that city in convention assembled, having so declared by resolution. This is truly an innovation. The amputating of the prepuce has been held to be a religious rite as well as a sanitary, and it has been necessary therefore, that it be performed by a rabbi. The antiseptic precautions which have been in vogue, namely the sucking of the wound by the mouth of the operator, will probably not be demanded of the physicians. There seems something incongruous between circumcision as the operation is described in the Bible and the operation as performed under modern antiseptic precautions. A combination of the methods of MOSES and LISTER will seem very novel until we get used to it.

We learn that DR. FERDINAND VON MUELLER has been elected President of the Australian Association for the Advancement of Science, for the ensuing year. By this selection an honor is conferred upon medicine as well as upon botany and paleontology, which have chiefly occupied the attention of this distinguished savant. For many years government botanist of the Australian Provinces, he has devoted special attention to the economics of botany, and his work on Select Plants Suitable for Culture in Extra-Tropical Countries, published by Geo. S. Davis, of this city, is the most valuable work of its kind extant.

The American Public Health Association will hold its next meeting in the city of Milwaukee, November 20, 21, 22 and 23, 1888. This association comprises in its membership the most distinguished sanitarians in America. Its sessions are always open to the public, and the papers presented and the topics discussed are of interest and value to all who are concerned with the care of the public health. Reduced rates on railroads can be secured. Address for blank R. R. certificates to be filled out at the place of starting, also for announcement of programme, R. Martin, M.D., Milwaukee, Wis.

The following is the comment of a rather sensible secular contemporary on the controversy over the late German Emperor's case: "SIR MORELL MACKENZIE has reduced the swelling in the heads of his German brethren. He sets them down for a crowd of pretentious corn-doctors, who could not cure hams. The Berlin physicians may yet sigh for their departed reputations and mourn the hour that, after mangling the throat of their sovereign, they started in to butcher the good name of his English physician."

Paris doctors have no "shingles," and it is a difficult matter for a stranger in need to find one of them. The cheaper class among them have a small sign giving their office hours, but not mentioning their names, while the higher grade have not even this. The happy mean between the French and the American doctor would be a very desirable thing.

Harper's Magazine tells of a devout colored clergyman who in his prayer implored the Lord to anoint his congregation with the "ile of Patmos."

Book Notices.

THE PHYSICIANS' LEISURE LIBRARY. DISEASES OF THE LIVER. By Prof. Dujardin-Beaumetz, translated from the fifth French edition, by E. P. Hurd, M. D., Newburyport, Mass.
Detroit: Published by George S. Davis.

This volume gives in a small compass the most recent and advanced views of the profession in regard to the pathology, diagnosis and treatment of diseases of the liver. These details are conveyed to the reader in a clear, terse and intelligible manner, and with no ordinary charm of diction, by an acknowledged master on the subjects treated.

Dujardin-Beaumetz is an author who reasons for himself and is not influenced by the opinions of others, unless they are based upon rational and scientific methods; he earnestly endeavors to differentiate between the various theories propounded by learned and ingenious writers.

In our distinguished French colleague we find embodied the attributes Locke expresses as indispensable to the investigator or searcher after truth: "He should keep perfect indifferences for all opinion; not wish any of them true, or try to make them appear so, but, by being indifferent, receive and embrace them according as evidence, and that alone, gives the attestation of truth." He, himself, often comes to original conclusions, and these are founded on reliable physiological and clinical data. Readers familiar with Dujardin-Beaumetz's works always hail with genuine pleasure appearance of another from his gifted pen, knowing before hand that they will derive no ordinary advantage and profit from its perusal.

The volume under review to-day fully maintains the pre-eminence of the author. It bears the impression of thorough knowledge, practical and theoretical, the outcome of unusual professorial and clinical experience. Throughout this work there is evinced a unity of purpose and a harmony of effects which add much to the elucidation of fundamental principles and inculcation of knowledge; other characteristics are profundity of thought, judicial impartiality, precision of observation, with an endeavor to harmonize all the facts with physiological and pathological knowledge. The solution of many current problems in the literature of liver disease, is ably and skillfully presented, and the author not seldom contributes his share towards the unravelling of knotty skeins.

Perhaps as satisfactory a feature as any to the general practitioner in connection with DUJARDIN-BEAUMETZ'S work is the information relating to the treatment of disease. He is never obscure or vague in his directions. His methods are rational, based on his ample knowledge of the nature of disease and on the scientific action of remedies. He enumerates besides important dietetic, hygienic and climatic measures, which often prove insoluble to the profession.

The present volume concludes with an essay on Hydatid Cysts of the Liver, and nowhere have we seen the subject stated with more comprehensiveness. It is, indeed, a careful and perspicuous analysis of the question with its appropriate, surgical treatment. The penultimate chapter is an admirable summary of inflammations of the liver, with their results, abscesses, etc., all lucidly and accurately detailed, with the significance of leading symptoms carefully presented.

There is little room for criticism in the works of so able a professor and clinician. The continuous evolution going on in medicine has left some parts not quite up to the times in the original work of the author, for it will be remembered that it appeared some years ago, but any shortcomings in that respect have been clearly and judiciously supplemented by the translator. DR. HURD is an acute, painstaking writer, an excellent French and German scholar, with a mind well stored in the medical literature of the day, and all pertaining to the profession of which he forms a distinguished ornament. In no better hands could the publisher have entrusted the work of translating DUJARDIN-BEAUMETZ'S works, and we congratulate MR. DAVIS upon the wisdom of his choice. Our familiarity with the French language enables us to speak with a knowledge and some authority on this subject, or, as the French themselves say, *avec connaissance de cause.*

Much credit is due the publisher for the good taste in the make-up, print, etc., of the above treatise. The volume also affords the advantage of a carefully prepared index.

A SYSTEM OF GYNECOLOGY. By American Authors. Edited by Matthew D. Mann, A. M., M. D., Professor of Obstetrics and Gynecology in the Medical Department of the University of Buffalo, N. Y. Vol. II. Illustrated with four colored plates and 361 engravings on wood.
Philadelphia: Lea Brothers & Co.
Detroit: John MacFarlane.

The first volume of this System was somewhat disappointing. It did not quite come up to what one has a right to expect from specialists so well equipped in this division of medicine as are the gynecologists of America. The fault, however, was rather with the editor than with the contributors. He seemed not to have been fully awake to what the profession demanded in a "System." In the volume before us, however, he has made ample amends, and has given us an imposing octavo volume of nearly 1,200 pages, replete with contributions such as are worthy of the advanced position which America occupies in gynecology. Among the contributors a large proportion have won preëminence in this field of work, and their names have been interwoven with the history of the specialty. DR. GEORGE J. ENGLEMANN has an article on Hystero-Neuroses; DR. T. GAILLARD THOMAS, one on Extra-Uterine Gestation; DR. SAMUEL W. GROSS, on Tumors of the Breast; DR. ROSWELL Park, on Diseases of the Breast other than Tumors; DR. EDWARD W. JENKS, on Fistulæ; DR. WM. S. LUSK, on on Malignant Diseases of the Uterus; DR. WILLIAM GOODELL, on The Treatment of Ovarian and of Extra-ovarian Tumors; DR. ROBERT BATTEY, on Diseases of the Ovaries. These are a few of the articles which appear, and they will suffice to give a conception of the character of the volume. Nothing more is necessary to convince one of the great importance of the work in the field of gynecological literature. Nothing as extensive or as exhaustive has yet been given from the press of this or any other country.

Medical Progress.

ALKALIES IN THE TREATMENT OF ECZEMA.—The treatment of eczema, like that of many other affections, is roughly divided by therapeutists into local and general. Some men lay great stress upon local applications—a few even considering them of paramount importance—and others place the general treatment first. Considering the many variations which the condition which we call eczema assumes, I think that we must recognize that it is in reality not a single disease, any more than the affections included under the term bronchitis; but that the eczematous eruptions of the skin are simply pathological changes which may be induced by several distinct complaints. External irritation in some persons is sufficient to cause an eczematous eruption, while in others nothing of the kind ever occurs from such a cause. In the former case we say the patient is "liable to eczema," or that he manifests the "eczematous diathesis;" in other words, with or without external irritation eczema in some form or other is liable to occur in him. I admit the existence of the eczematous diathesis, but I maintain that even in patients liable to eczema the eruption may be induced under a great variety of conditions.

It is the condition under which eczema appears in those who are predisposed to it, that we have to consider in our treatment. I shall therefore pass at once to the external causes. First we have mechanical irritation, such as friction of clothes, scratching, and many of the irritations giving rise to "trade eczema." Here of course the treatment consists in removing the irritation, or artificially protecting the skin against its effects. Next comes chemical irritation, such as arises from irritating medicaments and morbid discharges. These again must, of course, also be removed or neutralized. Temperature sometimes acts locally, as in patients suffering from the so-called *eczema solare*, in those exposed to artificial heat, and again in those exposed to cold and dabbling in water. In all these cases it is often impossible to cure the eczema unless the exciting cause is recognized and removed. Many of these cases, however, are simple dermatitis and not true eczema.

Then as to the internal causes. As I have said, I believe there is an eczematous diathesis which lies at the bottom of all forms of eczema, but that this tendency is only awakened under certain conditions. We have found the local conditions to vary, the general may vary also. It will usually be found, in all cases of true eczema, that the patient is "out of health," or feels "out of sorts." I do not think, however, that an exhausted nervous system, whether from worry, overwork, or excessive strain, is ever a factor in the production of eczema. It flourishes, indeed, amongst the weak and sickly, but not amongst the class we term neurasthenic. Undoubtedly the most common association of eczema is with some derangement of digestion. This will be found actually to exist or to have lately been experienced. Dyspepsia is a very frequent concomitant. I cannot help thinking that we have here the *fons et origo mali*, although some authors consider the nervous system chiefly at fault. But as I am not now debating the pathology of eczema, I shall only allude to the improper feeding of infants and the presence of uterine disorders as two other conditions under which this affection of the skin appears. The frequent occurrence also of eczema in those of the rheumatic diathesis must not be forgotten, as it often proves a most useful guide in treatment.

Acting on the principle that acids applied to an acid secreting surface and alkalies to an alkaline-secreting surface diminish the respective secretions, I have treated a large proportion of cases of eczema for many years by alkaline applications. The method may be termed unphysiological, on the ground that the morbid exuadtion of the eczematious skin has no parallel with the normal secretion of glands. My answer for the present must be the results. There is not the slightest doubt that an acid applied to an eczematous surface will irritate and increase the exudation, and I am equally satisfied that alkalies judiciously applied will have a contrary effect. Whatever views we may have on the pathology of eczema, the great diversity of methods shows that at present we have no very definite *rationale* of treatment. At the same time I do not argue that alkalies have any specific action. No one who has seen much of eczema can doubt that the associated disorder to which these patients are most subject is that connected with their digestive organs. The internal treatment is, therefore, undoubtedly of paramount importance. The one thing which appears most successfully to meet this indication is some saline aperient, which produces a "weeping" from the mucous surface of the intestines and also hurries on the contents. This clinical fact suggests that the cause of eczema lies in some imperfect process of digestion, whereby abnormal chemical compounds are absorbed, and, circulating in the blood, irritate especially the skin structures. These compounds are, I admit, unknown. Not only, however, are saline aperients successful in the treatment of eczema, but alkaline combinations are especially so. The most common prescriptions contain these drugs in endless variety.

This treatment is very successful for adult patients, but it is not nearly so useful in the eczemas of young children. In these cases, however, alkaline external applications are as successful as in those of riper years, if not indeed more so. Whether the fault in adult life lies in deficiency, and that of eczematous children in excess, of secretion of acid gastric juice, is difficult to decide; but the internal administration of alkalies combined with saline aperients in the eczemas of grown-up people is that on which the greatest general reliance can be placed. In children, however, an exactly opposite line of treatment will often be found successful. It is especially in scrofulous children and in infants that I have found benefit from the internal administration of hydrochloric acid. These little patients have generally some palpable digestive disturbance. I have frequently found unexpected benefit from the internal administration of nitrohydrochloric acid combined with sulphurous acid, at the same time pursuing the external application of alkalies. These latter may be used as solutions of bicarbonate of sodium (5 or 10 grains to the ounce), sometimes combined with small quantities of glycerin, or as weak solu-

tions of liquor potassæ (10 or 30 drops to the ounce). As a general rule it may be said that the more acute the eczema, or rather the more copious the exudation, the weaker must be the application. It should be made, whenever possible, continuously.

In chronic cases an alkaline ointment may sometimes be used, such as one containing 10–30 grains of bicarbonate of sodium to the ounce of vaseline.

The above is a brief sketch of the methods I have successfully adopted in a very large number of cases, many of which had been treated on other principles and with entirely different drugs without avail. At some future time I hope to enter into the details of particular cases, and to deal with the treatment applicable to the variations which the eczematous state presents.—Frederick Pearse, M. D., F. R. S. C., in the *Practitioner*, Oct., 1888.

PRACTICAL OBSERVATIONS ON THE USE OF SULFONAL.—(Drs. Rosenbach, Rosin, and Oesterreicher, Memorabilien, Heft 2, 1888.) Experiments in the clinic at Breslau were made by Professor Rosenbach with the following precaution: The drug was given to the patients either without their knowledge or with their concurrence and full knowledge of effect to be obtained; in the latter case it was followed on the next two or three days by doses of indifferent substances having a similar taste and appearance. For this purpose amylum in capsule or powder form was employed. Between the series of experiments and chloral hydrate were occasionally exhibited for the sake of comparison. The whole number of experiments was two hundred and seventy-four.

Sulfonal was given in 1, 2, 3, and 4 gram (15, 30, 45, and 60 grain) doses. A large number of patients who complained of sleeplessness slept well after taking but one gram. But almost all of them slept just as well on the succeeding nights on one gram of amylum. In none of these cases, therefore, could the psychical influence that the knowledge of the intended effect of the drug produced be excluded. Even those who, on the morning following the exhibition of one gram of the drug, declared they felt dizzy and confused, manifested the same symptoms after a similar dose of amylum. Two other patients who lay in the same room slept well after one gram of sulfonal, but vomited next morning. The same quantity of starch was given them the following night, with exactly the same effect, so that they requested relief from taking the drug, as the preferred insomnia to nausea. In only two cases could patients who were not influenced by starch be put to sleep by one-gram doses of sulfonal. No unpleasant after-effects were noticed in those not psychically affected. The conclusion reached from this series of experiments was that sulfonal in doses of one gram (15 grains) is an uncertain hypnotic. The effect of doses of two grams (30 grains) was very different from the preceding. In these cases also parallel experiments were made with indifferent drugs, but here in a large series of cases starch powders and capsules had no effect, whereas sulfonal produced a sound sleep; in very few cases did it fail. Sulfonal was given in some cases in the morning after a previous good night's rest to robust men who were told that they were taking a stomachic or antirheumatic; these were men who were not accustomed to sleep in the day-time; yet the effect was excellent, the patient sleeping from two to five hours; only those patients who did not remain abed, or who walked about in the garden, were not affected. There were no bad after-effects after two-gram doses except with those who were psychically affected, that is, those who also complained of the most *outre* symptoms after starch capsules, such as vertigo, dullness, headache, and nausea. Only a small number complained of a feeling of dizziness; other symptoms, as headache, were never observed. Sulfonal was given to many patients with heart diseases without injurious effect.

The conclusion from this series of experiments was, that in two-gram (30 grains) doses, sulfonal is a certain hypnotic, which fails only in the rarest cases; there are no unpleasant symptoms following its use. In its hypnotic power, two grams can be compared to ten to fifteen milligrams (⅙–¼ grain) of morphine without the after-effects of the latter. Sleep occurs in from one-half to one-and-one-half hours after ingestion. This dose has a decided effect on the sensibility of the bronchial mucous membrane. It was given to a large number of tuberculosis patients who were prevented from sleeping by their irritating cough. Although a number of those slept well, and felt a diminution of bronchial irritation after the starch powders and capsules, a still larger number obtained no relief except from the sulfonal. Many others did not obtain sleep and relief from two grains, but only after three grains of sulphonal had been taken. One-sixth of a grain (0.01) of morphine was most effective in preventing bronchial irritation than even three grains of sulfonal. There were no unpleasant after-effects following the three-gram doses of sulfonal. When four grams (60 grains) were given, a deep sleep followed, lasting three to four hours in the day-time or from eight to twelve hours at night.

The effect was much more powerful than that produced by 0.02 (⅓ grain) of morphine or two grams (30 grains) of chloral hydrate. All patients awoke with a dull, dizzy feeling, which often continued throughout the day. On the night following, the patients generally slept better than usual. Bronchial irritation was allayed by this dose better than by a dose of 0.01 (⅙ grain) of morphine. Besides dullness and dizziness, no other after-effects were noticed; but these effects last so long after four-gram doses that such a quantity should only be given in extreme cases. Rosin's general conclusion is, that sulfonal in doses of two grams is a hypnotic not inferior to morphine, chloral, and others, and by reason of its freedom from its after-effects, even when four grams (60 grains) are given, is to be recommended in all uncomplicated cases of insomnia.

Oesterreicher's researches agree with those of Kast and Rabbas, and may be summed up as follows: Sulfonal is an innocuous hypnotic followed by no inconvenient after-effects. It does not influence the respiration, pulse or kidney secretion even in cases of albuminuria. At present we can not tell if disturbances arise after a protracted use of the drug. It deserves preference over amyl hydrate and paraldehyde,

especially among the insane, owing to its being tasteless and odorless. Its effect is not absolutely certain, but is at least equal to that of chloral, to which it is to be preferred, owing to its safety, even in heart affections; also because it produces no condition of intoxication or preceding excitation.

In the first days of abstinence from morphine it has as little effect as the three drugs just mentioned. After its use sleep follows in from one to three hours—later than after the use of other drugs, but the sleep is continuous and sound. It is advisable to administer the drug several hours before bed-time.

In the present state of our knowledge we can not tell if a sulfonal habit can be established. At any rate it is not quickly established.—*Berlin Klin. Woch.; Internat. Rundsch.; Am. Prac. and News*, Sept. 15, 1888.

THE PHONOGRAPH IN PHYSICAL DIAGNOSIS.—Although some ten years have elapsed since Mr. Thomas Edison startled the world by inventing a machine that stored up sound and reproduced it at will, it is only within the past few months that this wonderful invention has been brought to such a degree of perfection as makes it of practical utility to the public at large. It is now some time since I began to investigate the practicability of this machine, so as to give the medical world a better and more certain means of teaching, recording, reproducing and demonstrating the physical signs and sounds of the normal as well as of the diseased condition of the heart and lungs.

At this early stage of my experiments, I must say that I predict a great future for it, and the opening of a new field for investigation in physical diagnosis and teaching.

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I have long waited for the perfection of Mr. Edison's phonograph, in order that I might again satisfy myself and re-experiment with this instrument in this branch of medical science. All of the old obstacles have been overcome, and it has been put before us as the perfect phonograph, so-called, by Mr. Edison. By the kind permission of the Metropolitan Phonograph Company, I was able to gain access and carry on my further experiments. It was a long wish to place into the hands of the profession an instrument by which we could record and teach our students physical diagnosis from the stages of our colleges. The sounds by this means can previously be stored up on these wax cylinders from patients that are at our disposal in the hospitals or from our private cases. Records of all physical diagnosis can be stored up and preserved for any length of time, so that one could illustrate from the old as well as from the new cases some interesting points of physical diagnosis at will, simply by replacing upon the steel coil the wax cylinder with its record.

From what observations I have already practically made, I am satisfied that the phonograph has a great fature and opens up a new field for our investigation.

The method which I adopted in making a physical diagnosis by the phonograph, was carried out in this manner: The phonograph was placed on a suitable table before me. The patient was undressed to the waist, a tube in the shape of the deaf conversation tube was then attached to the phonograph, the other end was placed on that part of the chest which was to be explored, the phonograph was set in motion, before placing the tube in contact with the chest. In order to register or record upon the wax cylinder that part of the chest which was intended to be examined it is found necessary either before or directly after examining any part to register by name that anatomical portion of the chest. This is done by speaking into the phonograph so as to be able in reproducing to distinguish those physical signs found in one part from the other.

For example, if I intend to examine the supra-clavicular region first, I talk into the phonograph before placing the tube on the chest, thus: "supra-clavicular region." These words are directly registered. I now place the tube on that part of the chest and examine slowly and thoroughly and so I continue to explore the entire heart and lungs. It will be found necessary to allow the cylinder to make a number of revolutions before removing the tube to another part in order that more than one respiratory sound or heart sound might be registered and thereby gain a thorough idea between their pathological and normal significance.

The same method is also carried out upon examining the heart sounds. When I had finished with my examinations I turned back the reproducer, so as to repeat that which was registered during my examination. The phonograph was set hard in motion, a stethoscope was applied to the ears and to the phonograph. I was able to hear all the sounds in their varied pitch and tone as the sounds came along. The words and sentences that I had spoken into it for the purpose of recording the loud marks were all reproduced as perfectly.

These experiments have taught me how in many other ways and uses the phonograph may be practically applied to aid us. With some extra experimenting I will be able to apply the use of the phonograph in such a manner as to throw the physical sounds which have been previously registered upon one of these wax cylinders, into the auditorium and thereby teach directly a large class of students. It is a known fact that one can learn a tone of a song quicker when he repeatedly hears it, than remember such a tone and sound as they are taught by means of words only. To carry out my purpose, other attachments must be made use of in connection with the phonograph. I have ordered a tin resounder in the shape of a trumpet, which I expect will throw the reproduced sounds some distance off.

Some of the future applications of the phonograph:

1. For recording the physical sounds heard from day to day and thereby enable to make comparisons. This will be found valuable in consultations, etc.
2. To keep a record of cases.
3. Instead of studying physical sounds from a book, cabinets with registered cylinders which will contain all the physical sounds, normal and abnormal, of the heart and lungs.
4. As an instrument for the standard of hearing the physical sounds. To make this meaning clear, for instance, in consultation there often exists a controversy in regard to the different opinions of certain physical sounds

that are heard by the different physicians, so if we can get an instrument which will always record the sounds alike, no difference of opinion will be possible.

The fact is that all ears have not the same power of hearing and by this mode the main standard will have to be the phonograph.—Dr. J. Mount Bleyer in the *Electrical Review Supplement*, October 27, 1888.

A New and Rational Treatment for Gonorrhœa.—From causes, not far to seek perhaps, urethral affections of a specific character have been sorely neglected by the general body of surgeons, and left almost entirely in the hands of a few specialists, who probably have become such by the accident of their obtaining appointments at institutions of a special character, rather than by any choice or predilection for the class of cases which there fall to their lot. It cannot, therefore, be wondered at that so little has been done to reduce the treatment of an affection such as gonorrhœa to something like an exact science. An approach to a better line has been made of late in the use of medicated bougies; but the objections to these are the time requisite for their proper application, and the difficulty of thoroughly carrying out the necessary details to ensure the absolute disinfection of the affected tract. It was, however, starting from this point that I concluded there must be a way of dealing with gonorrhœa which should be at once effectual. It occurred to me then that if remedies were made up in the form of an ointment and introduced by a proper instrument the difficulties would in all probability be overcome. Taking Allingham's rectal ointment-introducer as the key, I had made for me, by Messrs. Arnold & Son, an instrument which has proved perfectly efficient. I am now able to treat my cases with marked success; and, indeed, the average duration of the attacks is so short as to appear open to question—an average of five days,—but even in this I feel convinced that the best point is not reached. I shall be both astonished and disappointed if gonorrhœa, as such, will not be absolutely killed in a couple of days. Gonorrhœa is a specific inflammation; it is to be attacked by means that will disinfect and destroy its special virus, or perhaps I shall be more correct in saying that will kill its special micrococci. A thorough disinfection of the pus-generating, or micrococci-breeding area may, I believe, be obtained by two applications, and there will be left at most a simple and very mild inflammation to be dealt with. In the cases I have already treated by this new method I have had only a thin watery discharge left in exchange for the purulent one after two or three days, and I question whether it really will prove necessary to make use of the weak astringent injection which, for the present, I prescribe for safety's sake. Each ointment-container—an oblong box with a long broad screw to expel its contents—has stems made in various sizes, all of which fit the ointment-container; so that, as with catheters, the size proper for each patient may be chosen; and this is one point of prime importance in the treatment which I would enforce. The urethra must be streached by as large a stem as can be introduced; the object of this is that the whole of the surface may be made as tense as possible, and the ointment spread fairly and well over every portion. The bladder should be emptied immediately before the instrument is used, so that the urethra is well washed out from behind. The stem is to be well oiled before introduction. I use a mixture of eucalyptus and olive oils. When the stem is as apears necessary, the ointment is pressed out, and the whole instrument rotated as it is withdrawn, in order that the canal may be thoroughly wiped over. A little cotton wool and the usual dressing are employed to collect the discharge; and after three hours a mild injection is given, which is repeated four or five times during the day. A second use of the ointment is made on the following morning, and the injection repeated. The only medicine given is a saline aperient. I have found no need for copaiba, or the almost equally disagreeable sandal wood.

Before leaving this subject I desire to put on record a firm conviction which I have formed from a fairly long experience in practice. It is that a very considerable number of cases of gonorrhœa in the male are never really cured. The treatment apparently succeeds, and the patients are either discharged as cured, or, considering themselves well, cease further treatment. I believe that in these cases an attenuated form of gonorrhœa remains, and may remain for years. A man under these circumstances marries, and infects his wife; the wife possibly complains of irritation and "whites," although examination of the discharge will almost invariably show it to be yellow. Now the husband has attained his tolerance, and therefore is not necessarily, in his turn, greatly affected by the wife's condition. Over and over again I have met with these cases, and no better illustration of what I mean can be given than the case of a gentleman who recently came under my care. He was married about a year ago. He offered for my inspection a mild sample of what was undoubtedly gonorrhœa, saying that he had derived the discharge from his wife soon after marriage, owing to her having "come on unwell during connexion;" and, mark, this is the most common cause assigned in these cases. Doubting this, I pressed him, but he firmly, and I believe truthfully, avowed that he had been faithful. He acknowledged gonorrhœa prior to marriage, but considered he had quite got rid of it. His wife had always complained of irritation and "whites." She had lately been confined. I immediately asked as to the child's eyes after birth. The reply was just what I expected: "there was a great discharge," but, thanks to a good and experienced nurse, this had ceased after due and careful treatment.

In all cases of married women who complain to me of leucorrhœa, I invariably prescribe the use of a uterine douche, with a disinfectant and astringent, night and morning. It is of course unnecessary to alarm them in any way, but I have grown to consider it a duty to take this view of every case of the kind which comes under my notice, so strongly am I persuaded that this conviction of mine is only too well founded.—Charles I. Smith in *Lancet* Sept. 1, '88.

Exercise in the Treatment of Heart Disease.—Of late the question of treating heart disease by a plan having for one of its

prominent features systematic muscular exercise has been much discussed. A German physician, Dr. Oertel, who is said to have cured himself of fatty disease of the heart by this means, has made a careful study of the matter and has laid down precise rules for carrying out the treatment. Hence the practice has come to be commonly known as Oertel's method, and with some show of propriety, if any man's name must be attached to it, for he at least has succeeded in bringing it to general notice, although, as is remarked by M. Eloy, in a recent review of the subject in the "Gazette hebdomadaire de médecine et de chirurgie," Stokes, in his work on "Diseases of the Heart and Aorta," freely advised graduated muscular exercise, methodical gymnastics, and pedestrian excursions in the mountainous regions of Switzerland or on the high plateaus of Scotland and Ireland, and attributed to these muscular exercises a reduction of dropsical effusions as the direct result of the increased cutaneous transpiration and pulmonary exhalation produced by them. Indeed, before Stokes, Corrigan, as M. Eloy points out, had insisted on the importance of reducing the ingestion of liquids in cases of fatty heart—a measure that constitutes no inconsiderable feature of the method as advocated by Oertel.

An interesting discussion of the subject took place at the recent meeting of the Association of American Physicians, introduced by a paper on "Fatty Heart," by Dr. Forchheimer, of Cincinnati, a summary of which will be found elsewhere in this issue. From this discussion and from much that has lately been published on the question, there appears to be good reason to think that Stokes' and Corrigan's advice has been too much neglected in the past, or rather that physicians have stood in too much dread of following it. The error has been on the side of a supposed conservatism, somewhat on the principle of the starvation treatment of dyspepsia that held sway for so many years. Everybody knows, of course, that absolute rest for the heart is out of the question during the continuance of life, but the fear of overstraining the organ has led to a regimen of comparative rest that has apparently been carried too far—far enough, perhaps, in many instances, not only to have balked nature's power of cure, but also to have actually hastened the fatal course of the disease by favoring still further degeneration of the muscular tissue of the heart. It is maintained now that graduated exercise, together with a reduction of the amount of liquid taken into the system and the accessory features of the plan, is really capable of causing a disappearance of fatty deposits and the growth of new muscular fibers—in other words, of curing fatty degeneration of the heart. There seems to be nothing strained in this contention; indeed, it is somewhat strange that it was not set up long ago, seeing that compensatory hypertrophy has long been a familiar phenomenon.

But the danger is now that the mountain-climbing treatment will be tried too indiscriminately, as is likely to happen in the case of any remedial measure that has only recently come into vogue. It can hardly be doubted that lives have already been shortened by its adoption, either from its having been employed in unsuitable cases or from its having been carried out without due carefulness. This fact, however, while it should serve to emphasize the great need of caution and attention to minute details, ought not to be looked upon as a bar to future trials of the system. It may be hoped that within a short time the indications that justify its employment and the rules that should be observed in its application will come to be understood so definitely that it can be adopted with the maximum of benefit and the minimum of harm.—*N. Y. Med. Journ.*

Wound Treatment Without Drainage.—Ever in modern times has it been the ideal of the surgeon to have wounds heal without subsequent disturbance or attention after the post-operation dressing has been applied. Manifestly this will never be possible for all wounds, but every day we see the range of this much to be desired innovation widen, and at no distant time we may confidently expect to heal a majority of our operative and traumatic wounds by primary intention, without either drainage or redressing. The present necessity for drainage is the greatest shortcoming of our ideal, but much valuable work is being prosecuted in that direction, and the near future may be expected to clear up that which at present is probably misunderstood or falsely interpreted.

Perhaps chief amongst the recent workers in the direction of healing large wounds without drainage is Rydygier, who has been carrying on experiments upon quite an extensive scale (Wiener med. Wochenschrift, No. 18, 1888). He, of course, has only attempted thus to treat wounds which seemed favorable to his purpose, but it will be seen that this includes cases which might appear exceedingly unfit for healing without drainage. He concludes that such attempts should be strictly confined to wounds which we feel confident are entirely free from all diseased tissues; that the most complete disinfection of the wound area must be practiced before operation; that antiseptic irrigation must not be employed after beginning the operation; that all unnecessary sponging and other manipulation of the wound must be strenuously avoided, and that primary suture be employed, leaving small interstices here and there between the stitches which are to be allowed to fill with clot, and dry as rapidly as possible. Hence no protective is to be used, except in those cases in which the wound edges cannot be made nearly to approximate. Dryness, flat compression, and antiseptic protection are the features of the dressing and after-treatment. Drain tubes are directed to be introduced later, if the case should progress unfavorably; but, in Rydygier's hands, this was necessary in only about sixteen per cent.

He has been able to put this method of wound handling into successful use even in cases of hip-joint disease—surely a crucial test. The use of antiseptic—hence irritating—solutions upon the wound has been abolished, and, consequently, the main necessity for drainage (to carry off the immense ooze which is thereby produced) is done away with at once. Four cases of excision of large lymphomata of the neck have thus been dealt with, and thorough primary union secured, as likewise have breasts been excised, the scapula resected, tuberculous bones chiselled out, etc., with, in all, about sixteen per cent. of failures. The non-successes, however, were only partial, and in no wise

affected the patient for the worse. The method has been found of especial value in cases of surgical tuberculosis, in which, heretofore, long healing drainage sinuses have been a serious drawback or cause of relapse.—*Medical News*, October 27, 1888.

IRRITABLE BLADDER AND FREQUENT MICTURITION IN FEMALES.—This distressing complaint is commonly met with among female patients suffering from internal disease, and the diagnosis of the cause is sometimes by no means easy.

In cases where, after careful examination, we are able to exclude the urine itself as a source of irritation, and find that the uterine symptoms complained of would not be sufficient by reflex action to account for the continual annoyance, we are obliged to seek for some other cause, and I have remarked in a great number of these cases an unnatural appearance of the meatus urinarius, the opening being much smaller and rounder, reminding one somewhat of a pin-hole os seen in conjunction with a conical cervix uteri.

This description of case I find is comparatively easily cured by forcible dilatation of the meatus or the urethral canal, but I have noticed a rather curious phenomenon to occur during the process, that is, the escape of a considerable quantity of urine, when the blades of dilator are freely opened (and this after the bladder had been but a few moments before fully emptied to all appearences by the catheter), the amount of urine escaping being fully equal in some cases to that previously removed.

It has always been a puzzle to me where this urine came from, as the diagnosis of cystocele is comparatively easy, and a sacculated condition of the bladder could not possibly exist in all the cases in which I have noticed this peculiarity. We all know that when there is a tendency to prolapse of the uterus, and the vaginal walls are in a lax condition, cystocele is most likely to occur, the posterior wall of the bladder losing its necessary support, and so bulging backwards into vagina and forming a sac sufficient to hold a considerable quantity of urine, but it is in those cases where this factor has been carefully excluded by previous examination that I am at a loss to explain the cause of the peculiarity alluded to. Dilatation of the urethral canal I find the most useful treatment in all cases where the urine is normal, and spasm and irritability is complained of, but where there is a manifest want of tone in the bladder a mixture containing tr. ferri muriatis, cantharides, and nux vomica has always given me satisfactory results. A blister over sacrum I seldom employ, but have found it useful in exceptional cases. The galvanic battery I use as a *dernier ressort*, and have had most satisfactory results in some apparently hopeless cases, one lady patient having worn a urinal for more than five years night and day previous to my seeing her.

I consider the subject an interesting one, and hope my few remarks may direct more attention to it, as I know of no other complaint so likely to cause distress to the patient and the wearing out of her nerve force by the continual irritation and want of sleep.—Alexander Duke, F. K. Q. C. P. I., in the *Med. Press*, September 5, 1888.

THE SURGICAL TREATMENT OF NOCTURNAL INCONTINENCE OF URINE.—There is nothing new in the idea that the nocturnal enuresis of little boys is often due to reflex irritation, nor in the adoption of surgical measures for doing away with certain recognized sources of such irritation, such as phimosis, preputial adhesions, etc.; but a German surgeon, Dr. Oberländer, has lately carried the notion farther, and has attributed the trouble to abnormalities of the deep urethra. An account of his views on the subject has been published in the "Berliner klinische Wochenschrift," and M. Reymond makes the article the theme of an excellent critical review in the "Province médicale."

Into the deep urethra open a number of ducts—those of the prostate, of Cowper's glands, and of the seminal vesicles. It is argued that, although the glands mentioned do not enter upon their full functional activity before puberty, they are not completely dormant even at a tender age. It is true that they are then less disposed than subsequently to organic disease, but it is not to be forgotten that chronic inflammation of Cowper's glands has been observed in early infancy; moreover, that the functional capacity of these structures, though feeble, is real, is shown by the frequent occurrence of erections in infants, and even by masturbation. It can not be denied, then, says M. Reymond, that there are reflexes which take their rise from these glands

The treatment recommended by Oberländer is by dilatation of the urethra—to be applied, of course, only in cases that have been shown not to be amenable to medicinal treatment or to depend upon reflex irritation from more superficial situations. A dilator corresponding in size to No. 15 of Charrière's gauge, consisting of two separable blades, moderately curved, and provided with an index at the handle, is introduced with antiseptic precautions, cocainization of the urethra being employed in older children and brief general anæsthetization in infants. The extent to which the dilatation is to be carried is governed by the degree of resistance encountered. The length of time during which the instrument is kept in the urethra does not exceed three minutes. Sometimes several sittings are necessary. It is held that the dilatation enlarges the openings of the ducts emptying into the deep urethra and flattens out any abnormal prominences that may exist in it, thus relieving the muscular structure of the bladder from causes of reflex excitation capable of interfering with the due performance of its function. According to Oberländer, who has employed the manipulation in hundreds of cases, sometimes using force, it is free from danger.—*N. Y. Med. Jour.*, Oct. 27.

THE PROPER SALTS TO BE USED IN MAKING SOLUTIONS FOR TRANSFUSION.—Up to the present time common table salt has been largely used on both sides of the Atlantic in the preparation of liquids to be transfused during or after hemorrhage, and while little doubt exists that, in some cases, where other means are not possible, it is to be employed, still there can be no doubt that its action is far inferior to other mineral substances. According to the valuable and interesting experiments of Ringer, of London, with the frog's heart, the best circulating fluid is composed of NaH CO_3, one

part in 10,000 of water; Ca Cl_2, one part in 10,000 of a .6 per cent. saline and KCl_1, (1 per cent.) 1 part in 15,000 of .6 per cent. saline, or a simpler mixture, which is equally good, is a saturated solution of tribasic phosphate of lime, 100 cc. with 5 cc. of a 1-per-cent. solution of KCl. There can be no doubt that these compounds affect the cardiac apparatus most beneficially. It will be remembered that Kronecker, of Berne, has found that if a solution of sodium chloride be employed, it is necessary to support the heart by the addition of proteid matters. The results of Ringer's investigations show us that this is unnecessary when other salines are used, and place in our hands so accurate a knowledge that we can increase the quantity of one salt or the other according to the effect momentarily desired. Ringer found that a solution of calcium chloride of the strength of six per thousand, acted upon the heart as a tonic, but so prolonged the period of systole that the heart's action virtually ceased in a contraction. He found on the other hand that ordinary potash if circulated through that viscus immediately caused it to resume its beats and that if the two salts were given in such amounts as to antagonize each other the heart kept beating for hours. If an excess of potash was added, the contraction of the heart muscle was not so prolonged and gradually ceased until it stopped in diastole.

It is evident that if we can use salines which will stimulate the heart as well as increase the volume of the blood-stream, we gain more than if we use common salt, which will only do the latter, unless proteids are added.

Space forbids a longer reference to Professor Ringer's work, but we would suggest to our readers that on the next occasion, when forced to employ a solution for transfusion they use one composed of three fluid ounces (100 cc.) of a saturated solution of tribasic calcium phosphate with 75 minims (5 cc.) of a 1-per-cent. solution of potassium chloride, taking care that during transfusion the ordinary precautions are observed. There con be no dobt that these salts represent the necessary ones of blood serum, and that they will replace the use of defibrinated blood, and direct transfusion, because physiologists know that as all such blood-cells die on changing their abode they are harmful rather than of value to the patient.—*University Med. Magazine*, Nov., 1888.

THE THERAPEUTICAL VALUE OF FICTION.—The medical terms employed by recent speakers and essayists when speaking of works and fiction imply a belief that they are of distinct therapeutical service. Works of fiction have lately been "mental sedatives," "literary anodynes," and "intellectual antidotes." All of these terms are open to criticism. The arguments urged in support of the first two by Mr. Andrew Laing and by a writer to the Spectator clearly suggest that, if an epithet was to be sought from the medical vocabulary at all, the word "alterative" would more clearly have met the requirements. "Intellectual antidotes" would lead by easy transition to "intellectual poisons" as a fit and proper designation for much of the stuff to be found on railway bookstalls and in circulating libraries. The range might be almost indefinitely extended. "Narcotics" would include many society novels marked by tedious conversations and wearying descriptions. "Stimulants" might be expected to group together many of the shilling dreadfuls, but some would undoubtedly be better placed among "narcotics" and "poisons." It would also be legitimate to speak of literary "irritants" and "depressants." The latter term especially calls to mind many sad and weary moments spent in moodily regarding the efforts of some playful writers. Beyond all question, however, we have to be grateful to our novelist for our mental rest. Used rightly, in moderate doses and on appropriate occasions, novels certainly might almost be regarded as therapeutic agents. By diverting the thoughts into a new channel they serve to soothe a nervous system which has been stirred into a condition of restless activity by lengthy contemplation of any absorbing or irritating topic. Regarded as "drugs," they possess the special disadvantage of not answering in all cases. Special idiosyncrasies render some individuals particularly intolerant of some varieties of literary treatment. The circumstances of the case, the point of view of the reader, and his previous history will be important factors. The experience of most medical men would show that, when on a railway journey seeking a holiday after a period of prolonged strain, it is possible to "tolerate" much that would be rejected at other times.—*Lancet*, Oct. 13, 1888.

CASCARA SAGRADA IN SOLUTION WITH IRON AND OTHER DRUGS.—Dr. John Irving (Leytonstone) writes to the British Medical Journal, Sept. 22, 1888: Cascara sagrada is now so valuable as a laxative, and for dehydrating the mucous membranes of the alimentary canal, that its exhibition in an attractive form, as well as in combination with other important drugs, is a matter of some moment to practitioners prescribing it. The addition of water to the *B. P.* liquid extract makes a muddy and rather repulsive-looking draught, which does not improve upon further acquaintance. This unsightliness may be entirely and satisfactorily obviated without the use of either glycerin or syrups. A very small quantity of liq. ammoniæ (*B. P.*) dropped into the watery mixture will clear it to a bright ruby color, seen by transmitted light, the transparency of which is not altered by a flavoring agent such as tinct. aurantii, nor by a sweetness like saccharin: ℞ Ext. casc. sag. liq., ♏xxx; liq. ammoniæ, gr. iij; tinct. aurantii, ♏xv; liq. sacchar. (5 per cent.) q. s., aquæ ℥iss. M. Ft. haust.

Again, ammonia permits cascara to be dispensed with some preparations of iron, such as ferri et ammonii citras, the mixture, though dark in proportion to the amount of extract used, being a perfect solution; ℞ Ferri et ammonii citratis, gr. xxx; liq ammoniæ, ♏x; ext cascar. sag. liq., ʒss–ʒj; liq. saccharin. q. s., aq. aromat. ad ℥vj. M. Cap. unciam ter in die.

This combination is especially serviceable, with (or without) small doses of digitalis, where the heart is enfeebled and constipation exists, with tendency to œdema of the extremities; in such a case the liquid extract of cascara, given with the iron in regulated small doses three or four times a day, serves a obvious twofold purpose: (1) it counteracts the binding effect of iron in relieving the bowels, and (2) assists the

circulation by removing excess of fluid. In a similar way cascara may be combined with liq. bismuth et ammon. citratis in digestive derangements. Numerous other mixtures will doubtless suggest themselves, the only point to be kept in mind is that the medicine containing the cascara must be somewhat alkaline, and made so with ammonia.

THE VALUE OF PICHI.—Pichi is one of the drugs recently introduced, and promises to prove an acceptable addition to our materia medica. It has been highly recommended in genito-urinary affections, and several reports have already found their way into the journals. In a late issue of the Medical Age, Dr. W. Flagler, of Imlay City, Mich., reports its exhibition in a case of nephritis and cystitis which had stubbornly resisted very active treatment. After the administration of morphine hypodermically, catheterization, anodyne diuretics, sinapisms, and washing out the bladder with antiseptic liquids, all of which afforded but temporary relief, pichi was used in doses of ten drops every four hours, and relief was almost immediate.

Some months ago the writer met with a similar case, where it was deemed advisable to administer morphine for its immediate effect, but was followed at once by pichi—ten drops every hour or two. When first seen, the pain was excruciating, and it was supposed that the renal calculi were the cause, but it was soon learned that other attacks had preceded this one, and, as a rule, held on for several days. In this instance, however, the pain quickly subsided, the kidneys acted freely, and the patient went to work the following day as usual. Cases of this kind are of great interest to the physician, as any of his patients are liable to attacks of this nature.—*Med. Register*, Oct. 20, '88.

A NEW USE FOR ETHER DURING ANÆSTHESIA.—Very frequently during the early stages of the administration of an anæsthetic the patient "forgets to breathe" even before the ability to perceive peripheral irritation is lost. Even later in anæsthesia, when the breathing suddenly ceases we are accustomed to use cold water externally and to slap the patient with wet towels.

Such measures are generally called for hurriedly, and it is not at all uncommon for an exasperating delay to occur before the water arrives. The ether is always at hand, however, and I have found that in a large number of instances both in man and the lower animals the free use of ether poured upon the belly causes so great a shock by the cold produced by its evaporation as to cause a very deep inspiration, which is often followed by the normal respiratory movements. This is, of course, a simple procedure and one which has probably been used by others, but I have never seen it so employed.—H. A. HARE, M. D., Demonstrator of Therapeutics, University of Pennsylvania, *University Med. Magazine*, Nov. '88.

CORN SILK.—It is well known that most of the agents which possess value as diuretics possess that value because they tone up the heart and exercise a tonic influence upon the general arterial and nervous systems. Corn silk acts in that manner. It is a most valuable diuretic, soothing and unirritating. Like some other remedies, upon the action of which is based the law of "similia," in overdoses it produces, in healthy persons, the same symptoms which in smaller doses it cures. It is valuable in organic heart trouble, and in certain kidney troubles it is of great benefit. In irritable bladder, in gonorrhœa, in retention and suppression of urine it will be found of benefit, either in adults or children. Patients become used to its effects, and it is sometimes necessary to increase the dose after it has been continued for some time.—*Chicago Med. Times.*

DIABETIC REGIME OF DUJARDIN-BEAUMETZ.—*Permitted.*—Gluten bread, baked or stewed potatoes, broth containing fat, bouillon with poached eggs, broth from greens, cabbage or onions, but without turnips or carrots, all viands with non-starchy seasonings, fat, spinage, sorrel lettuce, cabbage, asparagus, artichoke, celery, mache, various salads, goose berries, glycerin, saccharine, tea, and coffee.

Not Permitted.—White bread, bouillon-panades or broths with peas, beans, or pastry, sauce or gravy, milk, cream or flour, beans, peas, beets, carrots, turnips, rice, amylaceous fecula, pastry cakes, oranges, cherries, prunes, sugar, etc.

Doubtful.—Milk, onions, leek, baked artichokes, melons, apples.—*Weekly Med. Review*, Sept. 22, 1888.

CASCARA SAGRADA WITH SALICYLATE OF SODA IN RHEUMATISM.—Mr. J. P. Martin reports in London Lancet, Sept. 1st, that he tried mixing cascara sagrada and salicylate of soda together, and was very pleased to find that not only did his patient rapidly improve, but that the mixture was perfectly clear, and not at all unpleasant to the taste. Many practitioners do not care to use the liquid extract of cascara sagrada on account of the nauseous taste, and the thick deposit which forms when water is added, but the above facts may interest them, and are not, I think, generally known. He gives, as a rule, fifteen grains of the salt and ten minims of the extract in orange-flower water every three or four hours.—*Quarterly Ther. Review*, Oct. '88.

COCAINE IN QUINSY.—The British Medical Journal, of May 19, 1888, contains an article by Dr. de Havilland Hall in the treatment of acute tonsilitis by cocaine. He reports several cases in which the disease had been cut short by the free application to the fauces of a twenty-per-cent. solution of cocaine, and believes that the drug acts by diminishing the sensibility so that deglutition can take place without pain, and also by diminishing the local congestion so that the inflammatory process is arrested. It would appear that cocaine is more active after the throat has been cleansed by a solution of bicarbonate of soda.—*Sacramento Med. Times*, Sept., 1888.

The Medical Age.

Vol. VI. DETROIT, NOVEMBER 26, 1888. No. 22.

Original Articles.

CLINICAL LECTURE.

BY HOMER M. THOMAS, B.A., M. D.,* CHICAGO, ILL.

Mitral Obstruction.—The first case I present to you this morning is Miss T., aged 39, American. She has complained of trouble in the chest for the last twelve years. Coincident with the distress in the chest there exists inflammatory rheumatism, which she has had for the last fifteen years. At times the disease has been of a most severe type, then it would subside and become less intense. At the present time her troubles are mainly those which we can attribute to an effect of the rheumatic state. The condition of rheumatism has given rise to structural changes in the blood. The condition is one of an excess of lactic acid in the blood. This state of the blood gives rise to acute endocarditis, which is most commonly of rheumatic origin.

In this case the condition is that of a structural disease within the heart, an organic affection of the mitral valves technically known as *mitral obstruction.* The pathology of this condition is found in the structural changes which the rheumatic state has caused, and which in turn has affected the superior surface of the mitral valves. The condition in the mitral valves is one technically known as *stenosis*, and the stenosis of these valves causes an incomplete closure of them. The obstructed condidition in the mitral valves leads to the current of blood being partially forced back into the left auricle, and form there into the pulmonary veins and thence into the pulmonary artery, and from the pulmonary artery into the right ventricle of the heart, and then again upon the right auricle; from that position to the ascending vena cava, and from there again to an obstructive state of the portal veins.

Now, how are these structural effects which follow this organic disease of the heart brought about? The normal mechanism of the heart would allow, upon closure of the mitral valves, the current of blood to be forced into the aorta; with the obstructive condition of the heart, part of the current of blood instead of being propelled into the aorta is forced back upon the left side of the heart, because of the obstructed condition of the mitral valves, due to their imperfect closure. With a condition of this kind, you naturally will have congestion of the lungs. This, in turn, gives rise to a hyper-secretion of mucus; the effect of this is to induce secretion within the bronchial mucous membrane, which leads to an acute bronchitis, hence you may say that the complicating bronchitis here is but the effect of a disease in the mitral valves, due to the passive congestion which the disease in the valves induces in the lungs. With an obstructed condition at the mitral valves and the consequent passive congestion in the lungs, naturally you must have some compensatory action upon the right side of the heart so as to prevent undue engorgement of the lungs, and this is secured through hypertrophy of the right ventricle. Hypertrophy of the right ventricle exists as a compensatory factor in the condition of mitral obstruction. Then from this compensatory hypertrophy of the right ventricle we have congestion in the lungs partially overcome, for the hypertrophy leads to strengthened heart-action, and that, in turn, gives you increased arterial tension. The blood moves with greater force, and the disease at the mitral valves is compensated for to quite an appreciable extent by the attendant hypertrophy of the right ventricle, but not completely so, for we find as an additional effect of the disease at the mitral valves that condition known as "the nutmeg liver," a state of the liver which is characterized by certain white, hardened bodies in the liver, surrounded by a dark or grayish mass of hepatic substance. It is called the nutmeg liver from its real resemblance to that article which is used in cooking. The condition of nutmeg liver must give rise to an impaired action of the secretions of the liver, and hence there will occur as a sequela of the cardiac disease impaired functional activity of the liver.

Then to review as results of mitral obstruction, we have acute bronchitis, hypertrophy of the right ventricle, the nutmeg liver, and complicating conditions of anasarca and dyspnœa. In addition to these structural changes in the system, the means by which we diagnose this condition are of interest; and, first, it is found in mitral obstruction that the apex beat is displaced downward and to the left; secondly, that the first sound of the heart is changed, so

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that instead of the normal sound which is characteristic of the heart, we have a blowing sound, much like that which you can produce by blowing out air from through the lips. This quality of sound is designated a murmur and is incident to the pathological state of the mitral obstruction. Diagnostically, you find the condition present by the physical signs of a displaced downward apex beat and to the left, and an increased area of cardiac impulse, and the presence of the murmur. The first sound of the heart is heard at the 4th intercostal space about an inch and a half to the left of the meso-sternal line.

Now, what can be done for a condition of this kind? It is significant first to consider the cause of the trouble, and that we relate to the repeated attacks of rheumatism. If the rheumatic diathesis is incident to conditions of hygiene that are causative of the affection, of course the first measure is to remove all exciting causes—in short, anything that tends to produce debility and general relaxation of the system. Having improved the nutrition of the patient, and assisted the general health in every way, the local trouble itself demands direct and specific treatment, and the first indication is that which will tend to overcome the impaired action of the mitral valves. And the one agent which has a selective action upon the heart is that of the tincture of digitalis; it tends to strengthen the ventricular systole, and at the same time gives tone and vigor to the cardiac ganglia. To administer this remedy for its best effects, the dose at the commencement of treatment should not exceed 5 minims, three times a day. If the compensatory hypertrophy of the right ventricle is not sufficient (with the use of this medicine) to overcome the marked pulmonary congestion, then the dose can be increased from 7½ or 10 minims, three or four times a day. Then advice which looks to the removal of the causes, to overcome all excitement, whether of a nervous character or otherwise, is indicated and necessary, for as far as the force of the heart can be increased, the number of pulsations diminished, the heart's action strengthened, you retard the processes of disease and assist nature in ameliorating the severity of the disease.

It is significant in this type of troubles that the patients do not relate their troubles to the heart. Organic conditions of the heart are seldom understood or even noticed by patients. Functional disorders are always noticed and the condition greatly exaggerated and intensified by the mental apprehensions of the patient; hence we are often misled by the statements of patients in respect to their trouble. We are apt to consider the condition as one of dyspepsia, of deranged functional action of the liver, or of bronchitis of the lungs. But as you see, many of the symptoms in this case are but the effect of a central cause in the heart. These conditions are subjective, the heart trouble is positive; the organic heart trouble in turn has been mainly caused by the rheumatic condition of the system which has produced it.

Unnecessary alarm is sometimes created in the prognosis of these cases. Whilst the condition is a severe one, and it is not my purpose to minimize its serious effects upon the system, yet such patients with care live for years with this condition, and are not necessarily much hindered in their circulation by it, for the hypertrophy of the right ventricle is nearly always sufficiently compensatory to greatly relieve the patient of many conditions that I have mentioned; and, additionally, if you tell such patients that the heart is weak, it is a sufficient warning for them to be careful in regard to active exercise. Hence it is not essential to pronounce a necessarily fatal prognosis in these cases. Death may come suddenly, the condition is a severe one, but the compensatory factors which tend to offset the effects of the disease are marked, and hence, as a rule, such patients may live for many years in comparative comfort, if due caution is observed. The prognosis is grave, but not necessarily fatal.

CHRONIC BRONCHITIS.

Our next patient is M. M. C., female, aged 19, American. Her troubles date back to last February, when she took cold, had a bad cough; suppression of menses; expectoration of a yellowish type, usually scanty and whitish in appearance; she has never been very strong; there is no history of hereditary trouble.

The case is one of chronic bronchitis and anæmia. You are aware that in many cases of exposure to cold bronchitis is produced in some, and an absence of it in others. How are we to explain the immunity of some and presence of the disease in others? For instance, a severe change of weather occurs here, possibly half of the students will suffer from a severe cold, while the other half will not; all are living substantially under the same conditions, and the same exciting causes are generally operative upon all, yet some escape and others suffer. The explanation, I think, is found not in the local cause, but in the systemic condition of the individual.

The causes of colds are more systemic and less local than is generally supposed. Any condition of the system that leads to constipation, to mal-excretion, to an impaired action of the skin, tends to produce passive congestion of ths system, and indirectly be an exciting cause for chronic bronchitis. This patient being in a state of health where her blood is not sufficiently nutritive, where her digestion is poor, and the general tone of health low, her condition makes possible the existence of acute

bronchitis and thence development into chronic bronchitis from a very slight exciting cause. With severe changes in the weather, and weak powers of resistance in the patient, the system is easily receptive to cold because of the constitutional state, hence the relief of chronic bronchitis in such instances would come from the treatment of the anæmia rather than local medication for the chronic bronchitis directly. To relieve the anæmia you want to use agents that are reconstructive upon the blood; those that tend to enrich the blood and assist nutrition. The best agents to secure this result are such as tincture of the chloride of iron, sulphate of strychnia, sulphate of quinine, syrup hypophosphites comp., emulsion of cod-liver oil, and the extract of malt. This is the general line of treament that should be pursued—all agents that are reconstructive and strengthening in their effect upon the system.

While you are relieving the anæmia the chest complication should not be neglected, and the use of agents that will tend to promote the expectoration of mucus from the bronchial tubes free them from the viscid secretion, and at the same time not disturb the stomach or affect the nutrition of the patient, are advised. My experience with the use of vaporized medicines is one that gives me confidence in their efficacy. A combination consisting of the compound tincture of benzoin, glycerin and alcohol, equal parts, is useful in such a condition as the case under consideration presents. This combination I use in a Semple's evaporizing inhaler, and the union of the three agents, forced by compressed air, produces a vapor much like smoke, which is easily inhaled, is bland and non-irritating to the mucous membranes, and yet expectorant and anodyne in its character. This method of treating bronchitis is a very useful one, because it locally medicates the chest, efficiently as a rule, and, at the same time, prevents any constitutional reaction that might follow the more general use of the expectorant type of medicines taken into the stomach.

Having secured the relief or amelioration of the bronchitis in the chest, the ultimate cure of such a case is in the relief of the anæmia; and employments that tend to produce anæmia, conditions of living that are non-hygienic in character, non-nutritious food, all such a line of exciting causes are to be removed, and agents that are reconstructive and strengthening in their action are especially indicated.

HYPERTROPHIED TONSILS—OZÆNA.

H. F., American, aged 5; presents the following history: Had diphtheria last winter, his present condition being the sequela of that; had whooping cough and measles and summer complaint this summer. Appetite good; sleep disturbed; family history shows that two aunts died of consumption; grandfather died of complications arising from heart disease and rheumatism, and grandmother died of organic heart disease. Patient lost a brother from consumption, who was 3 years and 7 months old; another brother died of bronchitis, aged 10 months. His present condition is one of hypertrophied tonsils and ozæna.

Now, as to the condition of diphtheria that preceded the state of the nose and from which he now suffers. It is very rare for diphtheria to affect a patient without leaving a marked susceptibility to throat disease afterwards. The extreme virulence of the diphtheritic poison is such as seems to leave the laryngeal membrane in a state of receptivity to inflammatory conditions. The membrane is relaxed, softened, and thickened from the effects of the diphtheritic poison, and never fully recovers its complete tone and state of normal secretions again.

We might in an analysis of the conditions that gave rise to the diphtheria here think that the fact of a condition of disease with a hereditary history relates to a constitutional dyscrasia, and a constitutional state that makes possible or more susceptible in the system such conditions as diphtheria, scarlet fever, scrofula, and the like. We might think this true, for we know that many are not affected by these troubles, even when living under conditions where the exciting cause existed. We can only explain immunity from them by believing that the condition of the system is such as to resist the onset of these affections, that there is something within the system that tends to throw them off after they are introduced into the system. But that is more hypothetical than pathological.

As to the immediate condition of disease in the throat and nasal membrane, the hypertrophied tonsils are the result of an inflammation of the tonsils. Repeated inflammations in the tonsils lead to hypertrophy of them. This condition with its attendant enlargement leads to malnutrition of the tonsil, and hence we have the existence of an enlarged tonsilar mass in the throat, which is insufficiently nourished. There is softening, caseous degeneration, a condition in which the tendency of the tonsil is to break down. The ozæna may result in some cases as an effect of the hypertrophied tonsils, for where they are very much hypertrophied they may so crowd back upon the naso-pharynx as to prevent proper respiratory efforts through the nose, and hence the lack of disinfection of the nasal passage leads to the formation of crusts, decaying and dried secretions, which in turn would affect the membrane so as to induce ozæna.

The question of operative procedure in hypertrophied tonsils arises frequently. My judg-

ment is that the best advice you can give is that which insists upon the removal of hypertrophied tonsils where there is no possibility of inducing retraction and a diminished size of the tonsil through local treatment. Probably 15 per centum of cases can be relieved, so that the hypertrophied condition is not a source of disease in the throat. In a large proportion of cases the hypertrophied condition leads to obstruction of the throat, post-nasal catarrh, chronic rhinitis; it leads to the habit of mouth-breathing, and results in fetid breath. Where this is the case, the existence of the tonsils is a menace to the general health of the patient, and their removal is necessary. Such operative measures should not be taken when an acute inflammatory state exists. The removal of the hypertrophied tonsils should be accomplished when there is no inflammation in the throat. Then they can be extirpated without much difficulty or danger.

RUPTURE OF THE WOMB THROUGH THE FUNDUS.*

BY T. HENDERSON, M. D., DETROIT, MICH.

This terrible, and in most cases, very fatal accident, is one which we are never prepared to meet. Its occurrence is, fortunately, so rare that the great majority of physicians pass through their entire professional career without encountering a single case. When, therefore, such does occur, everything is unfavorable for the operation which, when the os is not dilated, is the only chance we have of saving the patient.

This specimen which I present for your inspection, is the uterus of a Mrs. F., who was born in the state of New York, in 1847. She was married in 1873, and came to Detroit in 1883, where she remained until she died of the accident in question. She was symmetrically built; her height was 5 ft. 4 in., and weight 140. She had been delivered of three children, two of whom are living. She had two miscarriages, the last taking place during the month of May, 1886, after which she suffered for seven weeks from septic cellulitis, caused by the retention of the after-birth. In about twenty months she again became pregnant, suffering no more than during her former periods of gestation. The last few weeks previous to her expected confinement, she enjoyed as perfect health as was possible under the circumstances.

At 10 o'clock on the morning of the 1st of October, I was sent for, and arrived there at 10:45. As I entered the room where she was sitting on a lounge, supported by the nurse and her sister, she exclaimed: "Something has broken within me." I naturally supposed that the labor was well under way and that the waters had broken. I suggested that she had better go to bed, where I made an examination, and found, to my surprise, that the os was not in the least dilated. She collapsed immediately, a cold clammy perspiration spreading over the entire body. The pulse could not be taken for one half hour, and then only under bold stimulation. In most cases which have been reported, we have sudden cessation of the true labor pains, but in this case the regular pains continued for one-half hour after the accident. After these had ceased she referred all the pains to the pit of the stomach.

At 12 o'clock the cold perspiration ceased, the pain, became natural, the pulse returned, and though weak, was quite perceptible, and the woman spoke to those around her, and even smiled. The revival was, however, of short duration for she rapidly sank and died in much agony at 1:30 P. M.

The post-mortem showed the exact location of the rupture, which was from the centre of the fundus forward. The fœtus was entirely out of the womb with the face towards the left kidney and feet towards the right. The abdominal cavity was filled with clotted blood.

The causes of rupture, as reported, are various. Attrition against the bony structures, as the sacrum, the symphisis or the ileo-pectineal line. Such, however, was not the cause in the present case, as the rupture took place in a part where there could be no such attrition. It was not caused by an abnormally developed fœtus, as this weighed only eight pounds and was perfectly formed.

Degeneration of the womb tissue was the proximate cause of the rupture. The substance of the uterus was of a friable nature and could easily be separated by the fingers. The after-birth was firmly adherent to the uterine wall and was also degenerated.

The frequency of this accident is increased by each pregnancy. Thus, in 75 cases (Churchill) reported, 9 occurred during 1st pregnancy; 14 in 2nd; 13 in 3rd, and 37 in 4th, showing a gradual weakening of the womb tissue with each successive pregnancy.

Regarding the frequency of the accident, in a computation by CHURCHILL, 65 cases occurred in 42,768 patients, making one in 607. DR. BURNS says it occurs once in 940 cases. The Reference Handbook of Medical Science says: "Regarding the frequency of the accident, statistics are so variable as to be of little value.

We find by the statistics we have that in the great majority of cases reported the rupture takes place at the lower segment.

The prognosis to the mother is always doubtful, owing to her delicate situation. She is in danger of shock, hæmorrhage, peritonitis, metritis and septicæmia. As regards treat-

*A paper read before the Wayne County Medical Society.

ment we have our choice of the expectant and the operative. Of the former we have not much to say. The only chance seems to be in laparotomy which is certainly, at this particular time, a folorn hope, and few recover.

ON COMMON CRAMP AND ALLIED AFFECTIONS.*

BY SAMUEL D. HINE, M. R. C. S. ETC.†

It has been my misfortune to suffer most grievously from cramp of the muscle, chiefly of the lower limbs, but often affecting also the pectoral and abdominal parietes. I can find in our text-books only very scant notice of this very common ailment. But I am often informed by patients that they nightly suffer from this troublesome visitor. How is it that its visits are so generally nocturnal? I know of many, who suffer almost nightly, who never get an attack by day. Has position any influence in producing it? But, if so, why does it not come on when they enjoy an afternoon siesta on their sofa? I cannot explain why, but I know it for a fact. My own idea is that the main cause of muscular cramp is *pressure*, in whatever way produced. I knew an old lady, twenty-four years ago, who had a very urgent attack of cramp. I was summoned at 11.30 P. M., and, although I resided only half a mile off, when I arrived at the house I found that she was dead. On inquiry from the nearest relative, I made out that, having had a hearty supper of meat and porter at 10 o'clock in the evening, after going to bed quite cheerful and in her usual health, her daughter found her suffering extreme pain from cramp of the chest, and shortly afterwards found her dying. The stomach was distended with undigested food, and the rigor mortis was very marked. Many years ago, at 5.35 A. M., I received a sudden summons from a patient. He was in agonies: cramp in the stomach, cramp in the thighs, and cramp in the cords of his legs. He was a provision dealer, aged sixty-five years. I found him so exhausted with pain that he was very nearly dying from syncope. I ascertained from his wife that on the previous night, at about 9 o'clock, he partook of a hearty meal of pickled pork, onions, and red cabbage. A stiff glass of hot brandy-and-water containing thirty drops of chlorodyne afforded speedy relief. In another case, a gentleman of spare habit was seized at three in the morning with paroxysms of cramp in the thighs and calves. Nothing gave relief until he experienced a copious and very offensive evacuation from the bowels, when the spasmodic action vanished, and he was able to regain his bed in peace. Now, in all probability, had a warm enema been administered at an early period of the attack he would have escaped hours of acute suffering.

I have asserted my conviction that pressure is *the* cause of the muscular spasm usually called cramp; but let it not be understood that I look upon this as the *only* cause. By no means. Indigestion, however produced, favors the disease. Cold, external or internal, will bring it on. Certain articles of food and drink, which I will shortly specify, will cause an attack. But let us first look at what I think to be the chief cause—*pressure*. A distended stomach, loaded with food of an indigestible character, is one cause: here the paroxysms chiefly affect the pectoral and abdominal muscles, more especially the rectus abdominis. Gas in the stomach, alias flatulence, is another fruitful cause of pressure; also sulphuret of hydrogen in the transverse colon. The rectum loaded with fæces is a frequent parent of this evil offspring; and so likewise is an over-filled bladder. But external pressure will also provoke an attack—*e. g.*, the weight of one leg on another, or too heavy a load of bed-coverings. I have stated that indigestion causes cramp, but how? Acidity develops flatulence, and almost all sufferers from cramp will tell you that they have frequent heartburn. Latent gout is another factor in the production of this distressing ailment. Almost all the sufferers have been hereditarily gouty. The martyrs to cramp are mostly of the upper, well-fed, highly-nourished class—the pampered children of luxury and opulence. I have been struck with the fact of its extreme rarity in dispensary and hospital practice. Again, a large proportion of my patients with cramp have been men. The gentle sex are far more exempt. I attribute this to their being so comparatively little prone to self-indulgence in the matter of food and drink. As a rule, women are moderate eaters and drinkers, although truth compels me to say that there are some exceptions.

Now as to cold. My impression is that cold, whether external or internal, by producing a chill on an over-heated surface of body, will produce severe cramp. I remember six or seven years ago seeing a gentleman in the agonies of pectoral cramp. It was September, and he had enjoyed a long tramp after "the pretty brown birds." Perspiring profusely, he sat down under a big oak tree for his luncheon, and then had fallen asleep, lying on the long damp grass, from which the morning dew had not passed away. He was a healthy man, and habitually accustomed to taking long walks and other active exercise. Moreover, he was very temperate in the matter of diet, but his sufferings were so extreme that his gamekeeper and myself had as much as we could do to convey him to his dog-cart. I might multiply in-

*Reprinted from The Lancet, Nov. 10, 1888.

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stances, but one will suffice—a case of internal cold. A gentleman staying at a fashionable Dublin hotel, took a stroll in the early morning and returned thither. It was the genial month of August, and he was much over-heated, somewhat tired, and very thirsty. He called for a pint of cold milk, which he took at one draught. The effect was instantaneous. He was seized with agonizing cramp, pectoral and abdominal, evidently accompanied by spasm of the œsophagus (an uncommon complication of cramp). An emetic of sulphate of zinc gave speedy relief, and he visited the Dargle, the Seven Churches, and the Devil's Glen on the same morning.

The articles of drink productive of cramp are chiefly claret and cider. A patient informs me that if he goes out to dinner and partakes of claret he may surely calculate on a night of cramp. I have known hock act in a similar way; whilst good sound port and sherry are innocuous so far as this affection is concerned. I have found that total abstinence people are not more exempt from cramp than other folk.

As to food. Hard cheese, pork, shell-fish, conger eel, pickles, salads, with the two honorable exceptions of lettuce and watercress, are likely to produce cramp.

Unusual and excessive muscular exertion is another parent of cramp. In how many instances have I known young men who, having been shut up day after day in offices and perched on stools, when they have got their holiday and undertaken a tour, fondly imagining they were enjoying themselves, have walked themselves off their legs, and then been rewarded for their toil by a night of cramp. And I strongly suspect that many members of Parliament, who have sat out long nights of debate and then adjourn to the moors, could repeat the same story. The moral of this is: Do not attempt too much; turn not enjoyment into suffering.

We have considered the *exciting* causes of cramp, and now for those which may be classed as *predisposing*. I think the rheumatic or gouty diathesis, irritable bladder, stricture of the urethra, and stricture of the rectum rank in the first class. Sluggish liver, disease of the kidneys, Bright's disease, and Addison's disease take the second place.

Next as to prognosis. This is usually favorable. But I have certainly witnessed more than one death from cramp: not cramp pure and simple, but occurring to patients affected with extreme age, heart disease, or affections of the liver, supra-renal capsules, or kidneys.

Now we come to treatment. This may be naturally divided into preventive treatment and that of the actual attack. First, preventive. I advise no one subject to this ailment to take fluids within two hours of retiring to rest. A biscuit or dry toast should be the supper, charcoal biscuits for preference. If the main meal is taken early, let the last meal be partaken of not later than 8:00 P. M. If dinner is a late one, let it not be postponed till beyond 8:00 P. M. A final visit to the closet before retiring will be conducive of a good night. And now we proceed to the treatment of the actual attack. This is so sudden and so severely painful that we ought, as practitioners, to be prepared for the onslaught. I have been in the habit of prescribing for any crampedly disposed patients the following pill, to be taken every second night. It has afforded good results:

Ext. conii., 1 gr.
Ext. nucis vom., ½ gr.
Ext. belladonnæ, ½ gr.
Pulv. myrrhæ, ½ gr.
Gingerinæ, 1 gr.

But for the actual paroxysms local treatment is the thing. In the slighter cases, cold applied by a wetted sponge will afford relief. Friction by the hand, firmly used is also good. But in severe cases I have found belladonna liniment very efficacious; also belladonna liniment with chloroform; and where both have failed to relieve, pure laudanum, actively rubbed in, has proved successful. When all have failed, I have no hesitation in giving a careful inhalation of chloroform, which invariably succeeds. But this must strictly be avoided in cases complicated with heart or kidney disease.

And now for the allied affections. The cramps of cholera frequently constitute the principal suffering to the patient; but these, being merely symptomatic, may be dismissed with the passing remark that opium does not seem to influence them at all. Secondly, in spinal meningitis cramps of the legs are very severe, and the lower extremities, although proof to any ordinary impressions (punctures by needles or lancets included), are convulsed and tormented by horrible muscular spasms. If the remedies for the primary disease should prove successful, the cramp ceases; if not, it accelerates and aggravates the bitter end. There remains only to notice writer's or scrivener's cramp, which affects the upper extremities. Evidently it is caused by the constrained position of the hand in writing for many hours consecutively. My own experience of this variety of muscular spasm is limited. Nevertheless, I have come across a few cases, one in particular. An accomplished clerk in the Indian Office was laid aside for eighteen months from his duties. Although a very healthy young man, the extra duty to which he had been subjected had grievously told upon his muscles. His general health, however, continued good. He could ride, shoot, or fish; but the moment he took his pen in hand his muscles became perfectly rigid. Ultimately he perfectly recovered and resumed his former

position. I believe the best remedies to be long abstention from writing, open-air exercise, sea breezes, and salt water shower baths.

In conclusion, I may briefly summarize this paper by stating as my opinion that common cramp is due to internal pressure, gastric, abdominal, or from the bladder; also to cold. It is exceedingly painful. The suddenness of the attack is only comparable to the rapidity of its departure. It is amenable to treatment, both preventive and remedial. It is worthy of the study of scientific practitioners, and the results will reward them for their labor.

Correspondence.

BERLIN LETTER.

As this is the era of unprecedented activity in thearapeutic research and innovation, it seems quite advisable to register alongside of alleged or actual therapeutic feats, the failures encountered without new pharmacal acquisitions. Some clinician once remarked that we could learn more by the reports of failures than by the reports of success, and that in the matter of new drugs the teaching might well be confined to the properties and powers which the new drug did not own. Somehow, NUSSBAUM, the famous surgeon and therapeutist, has acted on this singular but felicitous idea, and has published a book with the title of "Surgical Failures," in which he describes with the view mentioned above numerous accidents, blunders, etc., in his own and in other surgeons' practice. One case reported by NUSSBAUM attracts our attention for its ludicrous aspects. A peasant with multiple ulcers of both legs was brought from the country to a great medical centre, and to the clinic of a surgical celebrity. After a thorough examination the right leg was declared curable, while the left was regarded as incurable and its amputation resolved upon. After the amputation an assistant drew the attention of the operator to the fact that the wrong leg had been amputated. To increase the vexation of the Professor, the right leg, which by mistake was saved, and which was regarded as incurable, healed in a short time spontaneously. I think a book published by some great clinican, entitled "Medical Failures," might be still more *àpropos*.

Quite recently a case of cocaine intoxication occurred here which deserves our earnest attention. A previously healthy young lady, aged 19, went to a dentist in order to be relieved from a violent toothache which for the last two days had prevented her from taking any food or sleep. The dentist injected three-fourths of a syringe of a 15-per-cent. solution of cocaine, *i. e.*, 0.1125 in two portions, in quick succession and extracted the tooth painlessly. The result of this apparently quite normal dose of cocaine caused the most violent cocaine intoxication yet recorded. The patient suddenly grew pale and fell back in profound coma, which was soon followed by violent clonic convulsions. Neither nitrite of amyl, nor applications of cold water had the slightest effect on the patient, who soon grew cyanosed. The pulse registered 180 and more, the respiration 44. When raised the patient fell back again and could not even lift her arms. Examination revealed besides photophobia, diminished sensibility of the cutis, anæsthesia of the mucous membranes of the nose and mouth and complete loss of the sense of smell. Soon another group of symptoms appeared, among which were specially notable cardialgia, urinary continence for 24 hours, insomnia for 30 hours and loss of appetite for four days. Recovery was very slow, though complete.

This remarkable occurrence ought to have the result of making us more cautious in the application of cocaine. At the same time the question arises, what is a normal or safe dose of cocaine for hypodermic use? LANDERER, who first recommended cocaine for subcutaneous application, fixed the normal dose as 0.015, DECKER as 0.02. Still the tolerance of cocaine is very various, as FRANKEL, of Vienna, has in a certain case used 10 syringes of a 1 per cent. solution, *i. e.*, 0.1 of cocaine and SCHMITT, of Frankfort-on-the-Main, 5 syringes of a 4 per cent. solution, in other words 0.2 of cocaine without any untoward results. In extraction of a tooth 0.05 is probably an equally safe and efficient dose, while in greater surgical interferences this dose can safely be doubled or trebled.

The application of cocaine in a new direction will certainly be of interest to American practitioners. PROF. OBALINSKI has successfully introduced cocaine as a constituent of a new anæsthetic mixture. OBALINSKI has for some time been engaged in experimenting with anæsthetic agents or mixtures which were to be free from the inconveniences and dangers of ether or chloroform. He was led to the use of cocaine by inductive reasoning. He knew cocaine to be effective in hyperæmias and that on account of its power to quickly raise the respiratory and cardiac functions it was distinctly antagonistic to chloroform and to hydrate of chloral. The experimenter therefore concluded to combine cocaine with chloroform. His observations showed that with the use of chloroform vomiting took place in 31 per cent. of all cases. If, however, before the use of chloroform the patient received 1 to 3 cg. of cocaine vomiting took place only in twenty per cent. of all cases. Still better results were obtained with a mixture of cocaine and chloroform. First pure chloroform was given in the Esmarch mask until the phase of tolerance had

been reached (usually 4 to 12 gm. in 4 to 12 minutes). Then a sufficient quantity of a 3 to 5 per cent. solution of cocaine is injected into the vicinity of the operative field so as to make the entire quantity injected 3 to 5 cg. After this application of cocaine (which can also be increased) no chloroform is given as a rule, though very small doses in considerable intervals are permissable. OBALINSKI has used this mixture thus far in 24 cases among which there were amputations of the femur and a herniotomy and expresses himself as well gratified with the results obtained. He claims as advantage of his mixture over pure chloroform greater safety, less frequent vomiting and absence of all unpleasant sensations on coming to. —*Nous verrons*—Another and quite useful innovation is a new bistoury made by Schmitt & Osnabrück. The principle of the bistoury is its being separable into two blades and two sides of the handle, with the view of obtaining a more perfect antisepsis of the instrument as was hithertofore possible. Another advantage of the new bistoury is that any form of knife according to the indication, can be adjusted in the handle. Besides the new instrument is not liable to rust so easily as the old bistoury, in which the carbolized water which in certain parts could not be wiped off caused the rusting.

S.

CASCARA CORDIAL IN SUMMER DIARRHŒA.

F. C. HERR, M. D., in the Therapeutic Gazette, of 1883, says, "upon theoretical grounds I am disposed to think that it (cascara cordial) would be an effective remedy in some forms of summer complaint in children," and further, "in all of the conditions save the last named one (summer complaint), I have had considerable experience with cascara cordial," etc.

The most extensive experience I have had with this remedy is in this disease, which is very prevalent in this climate, and the fatality is so great that every mother approaches the teething period in her child with an anxious dread. In the last eight years I have treated hundreds of cases both in the acute and chronic forms, and I think, without a single exception, have used cascara cordial.

Considering the success which has attended my treatment, it is a matter of surprise to me that all physicians don't employ it in this trouble. In the acute form with fever, indigestion and purging, I give gelsemium, subnitrate of bismuth and charcoal, until the more active symptoms have abated, when I resort to cascara cordial, gtts. x to xv three times a day, and seldom have a case develop into what you would call the chronic form. But the most beautiful effect is in the chronic cases, in which the mother has treated the acute stage herself with soothing syrup, blackberry cordial, Bateman drops, castoria or domestic remedies. In such cases you are generally called to see the shadow of the child, weak, poor, emaciated, no appetite or variances as the case may be. The stomach rejects everything or it is passed from the bowels undigested. The child has that irritable, old, anxious look, and becomes nauseated at the sight of a teaspoon. Now I give cascara cordial, gtt. x to xv, three times a day, and saccharated pepsin gr. iij to v, after eating. In extreme cases I give in addition, quinine by inunction. The little patient soon recognizes the bottle of medicine and his sad eyes perceptibly brighten when you come to him with it. He has no dread of the spoon now. In this it requires practice; the paroxysms become lighter and farther apart and the patient soon begins to gain between them, until they leave him a strong and healthy child, and he always wants his medicine. There are numbers of my families who keep it in the house in this country and give it upon the first symptoms. I believe I can claim the honor of bringing the first into this neighborhood.

H. C. JARVIS, M. D.

SCHELL CITY, MO.

PICHI IN CYSTITIS.

I would like to add my experience to that of the large number of practitioners who have reported their results from the use of fluid ext. pichi; I have used it in several cases of chronic cystitis with very satisfactory results.

Case 1.—A. F. B., photographer came under my observation July 22, 1888. Gave a history of chronic cystitis which he dated back to a neglected attack of gonorrhœa about four years previous. He complained of pain in region of bladder (which came on after exposure to cold and dampness) which in a few days was followed by a thick muco-purulent discharge; this would continue for several days (or even weeks) and did not seem to be modified to any degree by the treatment he had received. From what I could learn he had been treated by all kinds of physicians, regular and irregular, without the least apparent benefit. I had at that time placed in my hands a sample bottle of fl. ext. pichi (P., D. & Co.'s) and determined to try it on the case. I accordingly prescribed:

℞ Potassæ citratis, ʒ iv.
Fl. ext. pichi, ʒ i.
Fl. ext. buchu, ʒ iss.
Aquam puram, q. s. ad ʒ viii.

M. Sig.—Dessertspoonful t. i. d. in water.

July 25.—Patient says he has not so much pain, can hold urine longer and discharge not

so profuse. Prescribed magnesia sulph., to keep bowels regular and increased dose of mixture to tablespoonful doses. Continued to improve until he was, as he expressed it, entirely well; and now at present writing has no signs of a return of the trouble.

I might cite several other cases where I have used it with equally good results, and that too where all the usual remedies had utterly failed.

J. W. MAGILL, M.D.

FAIRPORT, N. Y.

PYROGALLIC ACID IN ECZEMA.

Pyrogallic acid has come into favor of late, in the treatment of epithelioma. More than one specialist has spoken highly of it in that disease. Tannic acid has also been used in cases of chronic eczema, but no one has yet tried pyrogallic acid in this disease. I suggest that it be given a trial.

℞ Pyrogallic acid, ʒ j.
Simple ointment, ℥ jss.

Mix. Use as a local application at night. Wash off in the morning and reapply again at night.

L. G. DOANE, M. D.

NEW YORK, N. Y.

The Medical Record thinks "there is a growing feeling that, after all, the title of 'mister' is as noble a one as a gentleman needs or can desire," and quotes, with its endorsement, the following sentiment from the Lancet:

"There is one title that is highly honorable, and is almost now a distinction among medical men who feel their own strength and rest on their consciousness of being masters of their art—the good old title of 'mister,' which some of the best men in the profession find ample for all social and professional purposes. It is certainly infinitely more honorable than any unacademic or unwarranted use of the title of 'doctor.' And we see many indications that this view is shared by the profession, and by many who think they have a right by courtesy to something more."

This may be quite English, you know, and, therefore, acceptable to Anglomaniacs, but it will not go in this country. True, the title of "doctor" is frequently applied to those who are not worthy of it, but the "good old title of 'mister'" is just as frequently applied to men who are not gentlemen. No, "doctor" will do and we shall vote against the substitute. The title has just as much honor in it as it ever had, and cannot be detracted from by its unworthy bestowal.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—PUBLISHED BY—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., NOV. 26, 1888

Editorial.

ALBUMINURIA AND LIFE INSURANCE.

The presence of albumin in the urine is usually held to be presumptive evidence of a pathological condition of the kidneys, and applicants for life insurance are nearly invariably rejected when presenting this abnormal constituent. That injustice is thus occasionally done is very generally admitted, but neither the examiner nor the insurance company cares to inquire more deeply into the case presenting this abnormality. That it is an abnormality is generally sufficient to decide the case.

DR. JAMES TYSON, Professor of General Pathology and Morbid Anatomy in the University of Pennsylvania, makes this question the subject of a paper in the Medical News of the 17th inst. He holds to the existence of a normal or physiological albuminuria, which is variously designated as functional, intermittent, cyclical and alimentary. He prefers the use of the term "functional," as it obviates the inferences deducible from the employment of the other terms. This condition may obtain in cases which should in no wise be deprived of the benefits of life insurance, and several illustrative cases are cited.

DR. TYSON submits a number of conclusions from his study of the subject. The importance of the matter determines us to reproduce these conclusions in full:

"*First.* It is scarcely necessary to say that the applicant must in all other respects present the signs of good health.

Second. The albuminuria should be unaccompanied by tube casts. However perfect may appear the health of an applicant with albuminuria, the presence of casts in his urine must effectually close the gates of life insurance against him. Casts and albumin conjoined can receive only one interpretation—structural change in the kidney, either acute or chronic. Here, however, let me say I have known men with good medical education say that casts were passed in a given specimen when there were none; certain granular aggregations having been mistaken for them.

Third. If the quantity of albumin is large, the applicant should be rejected irrespective of the presence of casts. The term large albuminuria admits, of course, of considerable latitude in its application; but I should say that an albuminuria is large in which the albumin habitually exceeds one-fifth the bulk of the specimen examined.

Fourth. A consideration which goes far toward establishing a functional character of an albuminuria, although not essential to this end, is the absence of albumin on rising in the morning. Nor dare it, of course, be said that such an albuminuria precludes the existence of organic disease. It must be taken in connection with the other considerations mentioned.

A *fifth* point of importance is specific gravity, meaning thereby the specific gravity of the twenty-four hours' urine, or what my friend DR. CHARLES W. PURDY, of Chicago, calls the "real" specific gravity. The specific gravity of any portion of the twenty-four hours' urine, or the "apparent" specific gravity, is of limited value, varying greatly with the time of day and relations to meals. If we regard the specific gravity of a normal twenty-four hours' urine (say 50 ozs.) as 1.020, the following may be laid down: *albuminuria is least significant when the specific gravity is high*, throwing out, of course, the consideration of sugar. The specific gravity is a direct measure of the solids, which in health are strikingly constant for each twenty-four hours, while the same is true in a less degree of the watery part of the secretion. Hence, the specific gravity of the twenty-four hours' urine is tolerably constant. In all forms of renal disease the solids are diminished, and in all except acute nephritis and cyanotic induration the specific gravity is lowered. In these two it is lowered because in them the quantity of urine is also markedly less, and, in consequence, the specific gravity is increased to 1.028 and even higher. In acute nephritis the presence of blood may also contribute to such specific gravity. Strictly speaking, acute nephritis may be ignored, because no one ill of it is likely to apply for life insurance. In functional albuminuria the specific gravity remains normal. DR. PURDY even says that his observations in many of these cases show a specific gravity above the normal standard, reaching 1.022 to 1.030.

Whenever, therefore, in addition to the absence of other symptoms and signs alluded to, the "real" specific gravity is above 1.020 another most important fact is in evidence against the presence of organic disease and in favor of the view that the albuminuria is functional. On the other hand, if the real specific gravity of the urine be 1.012, 1.010, 1.008, or even less, as it sometimes is, it would be hazardous to accept such a case of albuminuria, however good may be the apparent health of the applicant and even in the absence of casts. To judge unfavorably from the specific gravity of any portion of the twenty-four hours would be exceedingly unfair to the candidate.

Sixth. The signs of hypertrophy of the left ventricle and of high vascular tension associated with albuminuria are conclusive symptoms of renal disease and should exclude the candidate. High vascular tension may sometimes be shown to exist by the sphygmograph, even when not appreciable to the touch.

Seventh. A highly important consideration is the age of the candidate. Albuminuria is much less apt to be of the functional kind in persons over forty years of age than in those who are younger, especially between the ages of twenty-one and thirty-five. It is questionable whether any person with seemingly functional albuminuria who has reached the age of forty should be accepted unless he has been long under the observation of a competent and conscientious observer.

Eighth. The presence of true gout in any shape precludes admission to life insurance, because gout is always sooner or later followed by intestinal nephritis.

Finally. The retinal symptoms so commonly associated with chronic Bright's disease, although usually late in their appearance, do sometimes form the earliest noted sign of this affection, and whether or not conjoined with albuminuria must effectually exclude the candidate from its advantages.

These, in brief, are the conditions which, if observed, appear to me to enable one to establish conclusively, the functional character of an albuminuria, the presence of which should not exclude a candidate from life assurance. They might have been further elaborated, but I prefer to leave them to be discussed as presented. It is to be remembered, however, that observations should extend over a considerable period of time, also that there is reasonable doubt as to whether the requisite knowledge and training are sufficiently general to secure intelligent recognition of the conditions. Take, for example, so simple a matter as examining for tube casts, which may be regarded as almost the easiest sort of microscopical work. Yet, how few medical examiners are competent to make such examinations. Most of them have no microscopes, and many who have them use them so rarely that their opinion whether positive or negative as to the presence of casts cannot be relied upon. On the other hand, there are those who are competent to apply these conditions, and it is reasonable to suppose that this number will gradually increase.

I conclude, therefore, that life assurance associations should recognize a condition of functional albuminuria out of consideration of their own interests, as well as in justice to a class

which is coming to be recognized as more numerous as our knowledge increases, and who are blindly excluded from benefits to which they are entitled."

SULPHITE OF ALUMINIUM – A NEW ANTISEPTIC.

D. W. C. WADE, M. D., of Holly, Michigan, introduces a new antiseptic under the name of the sulphite of aluminium, to which he finds no reference in literature. His attention was not directed to its study by accident, but by a desire to pursue an investigation with reference to the development of antiseptic therapeutic measures, if possible, more fully freed from objectionable features than any at our disposal. Long ago it was sufficiently evident, from the trend of medical literature, as well as from personal experience, that no agent in existence possessed enough merits to meet the requirements, satisfactorily, of general, practical antisepsis. Such an agent should be at once efficient, non-poisonous, unirritating, without offensive odor, soluble or insoluble, as desired, capable of remaining unaltered by albumen, not costly, sufficient for most purposes of the physician and surgeon.

The sulphite of aluminium, DR. WADE claims, combines these qualities, and he knows of nothing else that does. After many chemical and clinical experiments, he is led to prefer the sulphurous salts of this metal as the best representatives of its antiseptic, therapeutic properties. Of these he has produced two—the sesqui-sulphite and the persulphite. The former is insoluble in water, and the latter soluble. These opposite physical properties, he holds, render these salts susceptible of application to almost every conceivable condition where an antiferment is indicated. In efficiency they should be ranked very high, on theoretical grounds. Presuming that they are not less active than the acetate of aluminium, which is given by STERNBERG as 1 to 6310 (DE LA CROIX) and 1 to 5250 (KUHN), it will be seen that there are no other agents nearly so active as the aluminium salts, that may be exhibited with the same freedom.

Taking bichloride of mercury as a standard, the comparison must be made thus: MIGUEL gives the preserving proportion of this germicide as equaling 1 to 14300. One-tenth of a grain is a large dose to administer by the stomach. Three hundred times as much sesquisulphite of aluminium can be administered with safety. If the bichloride is two and a half times as active as the aluminium salt in equal quantity, the difference in dose permissible, favors the relative efficiency of the latter by one hundred and twenty times. Exactly the same relations exist in the topical use of these two chemicals.

It appears, by reference to authorities, that aluminium unites with acids to form salts in the proportion of two molecular equivalents of the base and three of the acid, and in this way the sesquisulphite contains three times the number of equivalents of acid that the sulphite of sodium does. The insoluble salt may be made by taking the theoretical quantities of potassic alum and sulphite of sodium and mixing their solutions in water; the precipitate to be washed and carefully dried. The proportion is ten parts of alum and eight of the sodium sulphite. In practice, however, it is found that no two samples of the commercial drugs give the same results as to proportion, but this is of no consequence, except in the question of economy of materials.

The persulphite may be made by adding sulphurous acid to the undried sesquisulphite to solution and crystallizing without heat. A more expensive, but much more rapid. method is to precipitate the persulphite from solution with alcohol, filtering or decanting, washing the precipitate with alcohol and drying on bibulous paper.

HOW TO INSURE THE SEX OF THE CHILD.

The desideratum of these later days is some plan according to which the sex of the future child may be fixed. The objection to child-bearing in a given family is the preponderance of an undesirable sex in the offspring. In the struggle for existence the female, for instance, is obliged to undergo hardships from which the parents fain would save her, and not being able to insure a male child, nature is thwarted in the function of generation. A common question on which physicians are asked for an answer, is "Is there no way of fixing the sex of the child?" To enable them to give this answer the inferior animals have been extensively experimented with, but no deductions as yet made have been of any utility when applied to the human species. This is, unquestionably, largely due to the fact that in the procreation of the latter, passion bars out the intelligence which men bring to bear in the matter of rearing the former. It is a paradoxical fact that in the generation of the kings and queens of creation passion and blind chance are dominant. Neither in the mating of the male and female nor in the exercise of the generative function of the mated pair, is there the slightest approach to that intelligent care as the result of which the breed of inferior animals is so much improved and their sex regulated. There may, however, be some exceptions to this prevailing rule, or rather absence of rule, of "hit or miss" in these matter, and it is but meet that those

who are disposed to give the human animal as good a show as is accorded the inferior animals, should be placed in possession of the latest acquisitions to such knowledge as exists on this important subject. A DR. DUPUY, of France, has been making some observations, the results of which he publishes in L'Année Med. de Caen. He declares that from a statistical study of over two hundred families (over 1000 infants) it results that when the sex of a first child is known, one can determine in advance what will be the sex of infants subsequently born, and how a choice may be made.

The first child having been conceived in a menstrual period, which we shall designate as No. 1, if it be a boy all infants conceived, for example, in the 11th, 13th, 15th, 105th, etc. menstrual period following, will be boys; while all conceived in the 12th, 16th, 106th, etc. after the first conception will be girls.

Hence if a father who has had a girl wishes a boy, he must count the number of menstrual periods passed through by his wife since her last accouchement, and impregnate her during the 2d. 4th, 6th, or some even number of times, counting always the first impregnation as No. 1.

In cases of twin births with a single placenta, this rule holds good, but in cases where the placent is double, a superfœtation has occurred.

This rule does not hold good when a second husband is taken; the count must then begin anew with the first child born.

DIAGNOSIS OF GASTRIC AFFECTIONS.

Singular as it may appear, when we consider the causative relations between gastric disturbances and splenic derangement, the ability to diagnose correctly the nature of the stomach affection is not a common qualification among practitioners. DR. SAUNDBY (Prov. Med. Journal) has, therefore, done good service by formulating a schedule of symptoms for the differential diagnosis of the several most common gastric ailments.

Symptoms.	Gastrodynia.	Atonic Dyspepsia	Gastric Catarrh.	Ulcer.	Cancer
Character of pain.	Dull, heavy	Dull, heavy	Burning soreness	Acute stabbing	Cutting
Locality	Epigastrium	Epigastrium	Behind sternum	In one spot	Epigastrium
Incidence.	Immediately.	After 1 or 2 hours.	After 2 or 3 hrs	Immediately.	After 1 or 2 hours.
Tenderness.	Sometimes	None	None	Usually	Usu'ly
Vomiting.	Usually	None	Often some retching	Usually	Usu'ly
Hæmatemesis	None	None	None	Usually	Usu'ly
Tongue	Clean	Clean	Furred	Clean	Variable
Tumor	None	None	None	None	Usu'ly
Age . .	Usually under 30.	Any age	Any age	Usually under 30	Usu'ly over 40
Sex	Usually female	Either	Either	Usually female	Usu'ly male

ANTIPYRINE AS A UTERINE SEDATIVE.

Should the later claims, of uterine sedative properties, made for antipyrine prove valid, this new drug will be installed as one of the most useful on the list. It is reported to have been given with excellent results for its anodyne action in dysmenorrhœa and in after pains. So certain is its action said to be in the latter condition that when it fails retention of the placental debris is to be suspected. It is also claimed to be capable of mitigating the pains of parturition and in some cases it is said to have made labor quite painless. The comparative innocuousness of the drug will warrant considerable freedom in its use with a view to determining the justice of these claims. It is given in enemata in doses of from twenty to thirty grains, although it may also be administered per os, in properly reduced doses, should there be no contraindication in an irritable condition of the stomach.

Notes.

Here are some of the questions (and answers thereto) submitted by the Virginia State Board of Examiners to applicants for license to practice in that State—the applicants in each case being also graduates in medicine:

Give test for mercury. *Ans.* Do not remember.

Give dose of tartar emetic. *Ans.* Ten grains.

Give dose of sulphate of atropia. *Ans.* Hypodermically, 10 grains; by mouth, 60 grains.

Give dose of corrosive sublimate. *Ans.* One grain.

How would you treat placenta prævia? *Ans.* I don't know what it is.

Give dose of powdered cantharides. *Ans.* Forty grains.

What is the source of iodine? *Ans.* It is dug out of the earth in blocks, like iron.

Describe dengue, or break bone fever. *Ans.* By four applicants: A fever that comes on soon after the bones are broken. By one applicant: The patient should be cautioned against moving, for fear the bones should break.

Describe the peritoneum. *Ans.* It is a serious membrane lining the belly and extending into the chest, covering the heart and lungs.

The Medical and Surgical Reporter voices its indignation in the following mild manner: "It is with considerable regret that we observe that some of our most respected contemporaries at times relax a little the virtue which usually marks them, and admit to their pages 'reading notices' published solely in the interests of their advertisers." It declares that "one of the most insinuating of these appeared not long since in several of the best medical jour-

nals of the country, in the shape of a review of a small book." These quotations are from its issue of November 6. We quote also from an *editorial* in its issue of November 17: "* * * * We therefore beg our readers to send in their orders now (without money) for Pocket Records for 1889. The price will be: One Dollar for a Pocket Record for thirty patients a week and $1.25 for a Pocket Record for sixty patients a week." This is, of course, a very important announcement, but "it is with considerable regret" that we find it in the editorial columns instead of in the advertising department of a journal which knows so well how to be indignant at the attempted encroachments "solely in the interests of advertisers." As of old, it makes much difference whose ox is gored.

On the 21st ult., DR. J. B. MANSON, an old and highly esteemed physician of Georgia, was set upon and fatally beaten by the father of a child whom he was treating for typhoid fever. The unfortunate doctor survived the attack just three days. It is only charitable to believe that the assassin was insane, and yet it is by no means a rare occurrence for most conscientious physicians to be subjected to abuse while in discharge of their duties. A physician of this city found himself a few years ago, after the death of a woman under his charge during confinement, in a position of great personal danger, from which his physical prowess only delivered him. On another occasion a physician was severely beaten by a brute of whom he solicited his bill for services rendered. The instances are not infrequent in which the physician literally takes his life in his hands when going out on his mission of mercy.

"Jack the Ripper" still continues his murderous attacks on the abandoned women of Whitechapel, London, and has succeeded thus far in eluding the police. In each of his nine victims the uterus has either been removed or an attempt at its removal was made, while the fatal stab has invariably been made so as to sever the jugular and the carotid. This array of bloody deeds has turned loose a vast flood of speculation of the mental condition and the motives of the "Ripper," and both the medical and secular press contain the opinions of many callow but, withal, very profound minds on these questions. The case is without a parallel in the annals of crime, and certainly the temptation to speculation as to its nature is very strong. Unfortunately, however, the energies expended in this direction have thus far been unproductive of any good result.

A local contemporary is authority for the statement that DR. WILLIAM PEPPER, of the University of Pennsylvania, advised President ANGELL, of the University of Michigan, against permitting the removal of the clinical department of the latter institution to Detroit. Should this charge prove on investigation to be true, DR. PEPPER will find himself in water of a very elevated temperature before many moons. There are those in Ann Arbor whose hearts are set on coming to this city with their students, in order that they may instruct them in practical medicine and they will not brook this outside interference. Should the vials of these gentlemen's wrath once be opened on DR. PEPPER, he will wish he had emulated the oyster in dumbness on this question.

And now we have it at last: It is the "top hat" that causes baldness. A writer in the Lancet is authority for the statement, and he fortifies his position by quoting from DUHRING to the effect that "The hard rim of the hat pressing on the temporal arteries narrows the blood stream and checks the advance of pabuum to the hair." It is the plug, therefore, and not excessive cerebration that gives rise to the thinness of capillary on the summit. This is unfortunate for the young doctor who is obliged, in order to appear older than he is, to wear the "top hat." Heretofore he has been able to ascribe the premature baldness thus induced to a precocious intellectuality. Truly his lines are growing harder.

The Philadelphia Medical and Surgical Journal (October 6, 1888) says that "a journal which publishes only laudatory notices of wares advertised in its pages cannot escape the suspicion of being influenced by mercenary considerations." We like the ring of such statements as this. They have a tendency to lift one above sordid "mercenary considerations." Such considerations are quite unworthy the pure minds which preside over the medical editorial sanctum. Editors must never give way to the "mercenary," and when they write editorials advertising any class of goods they should be "roasted." The purity of the sanctum must be maintained, even though some of its incumbents must be "fired."

DR. CASTLEMAN, of Houston, Texas, finds himself the defendant in a suit for malpractice for having administered to a child one and a half grains of antipyrine in combination with six drops of sprits of nitrous ether. The temperature as taken in the mouth was 105°. After taking the second dose convulsions supervened and the child died. The parents, as usual, were instigated to the suit by another practitioner. The editor of the National Druggist, having tested the toxicity of the mixture of antipyrine with the spirits of nitrous ether, declares it to be non-poisonous.

SIR MORELL MACKENZIE'S book, in which he replies to the attack made on him by his Ger-

man associates in the case of the late Emperor Frederick, reached a sale of 100,000 copies in two weeks after its appearance. His "justification" was thus profitable in a two-fold sense. His statement has met the approval of the Empress, who sends him an autograph letter expressing her thanks and confirming some of his statements from her own knowledge. This letter is like wormwood and gall to the Germans.

"Free as the eagle, the noblest bird of Columbia, who laughs with scorn at the power displayed even by the steam engine, as he mounts aloft amid the lightnings and whirlwinds. Rising amidst the wrath of the tempest, and soars, with clapping of pinions, upward and upward till his form is lost in the gloom and blackness of the storm." No, gentle reader, this is not the frenzied utterance of an inmate of a lunatic asylum. You are very wrong in supposing so. It is an extract from an address to the graduating class of the American Medical College, and the orator is still at large. It is but just, however, to state that his home is in St. Louis.

PROF. D. HAYES AGNEW will shortly retire from active practice and will resign his chair in the medical department of the University of Pennsylvania. He is the last of the four great contemporaneous surgeons of Philadelphia. The other three, PANCOAST, SMITH and GROSS, died in the harness, but AGNEW proposes to enjoy some of the *otium cum dignitate* before he goes over to the majority.

DR. N. S. DAVIS will retire from the Editorship of the Journal of the American Medical Association on January 1st, next, and the trustees of the publication have selected DR. JOHN B. HAMILTON, Surgeon-General of the U. S. Marine Hospital Service, to fill the vacancy to be thus caused.

The latest thing in homœopathy is the administration of snakes, instead of whisky, as a remedy for delirium tremens. The remedy is certainly a logical one, from the standpoint of *similia similibus curantur*, and is scarcely more ridiculous than some of the other remedies employed by that school.

Young physician (examining a patient): "Sir, you must drink less coffee." Patient: "But I never drink any coffee, at all." Young physician (still perfectly cool): "Well, you ought to."

A frightful and unprecedented accident is reported in a Western newspaper. The victim, a man, fell from a height of fifteen feet and broke one of his ribs in such a manner that one end of it protruded into the placenta!

THE REV. TALMAGE suggests that the man who wrote the book "Every Man His Own Doctor," should now write one entitled "Every Man His Own Undertaker."

Magistrate—"Have you no written document to prove that your wife is really dead?" Peasant—"I have the doctor's bill."

Book Notices.

TREATISE ON THE DISEASES OF WOMEN. For the use of Students and Practitioners. By Alexander J. C. Skene, M. D., Professor of Gynecology in the Long Island College Hospital, Brooklyn, New York; formerly Professor of Gynecology in the New York Post-Graduate Medical School; Gynecologist to the Long Island College Hospital; President of the American Gynecological Society of 1887, etc. With 251 Engravings and 9 Chromo-Lithographs.
New York: D. Appleton & Co.
Detroit: John Mac Farlane.

DR. SKENE'S position among the gynecologists of this country has long been fixed, and in spite of the multiplication of treatises on his specialty during late years, what he has to say will be received with attention. His experience has been so vast and his powers of observation are so well recognized that his conclusions must compel consideration. In the book before us he has omitted the history of gynecology and the discussion of all unsettled questions. This omission has left him ample space for the treatment at appropriate length of all questions touching which our knowledge is decisive. The practical nature of the book is, therefore, its distinguishing feature, and the breadth of the author is discernible in the fact that he does not regard the uterus as the *fons et origio malis* in the affections which afflict the woman. He recognizes the fact that the patient is a woman with a uterus, rather than a uterus with a woman, and his treatment is shaped accordingly. We cannot spare space for a detailed description of the book and must be content with a statement of our general impression. This is exceedingly favorable, and no physician, no matter as to the number of treatises or gynecology which he may be possessed of, but will find DR. SKENE'S book very valuable.

A MANUAL OF GENERAL PATHOLOGY. Designed as an Introduction to the Practice of Medicine. By Joseph Frank Payne, M.D., Oxon., F.R.C.P.; Late Fellow of Magdalen College, Oxford; Physician and Joint-Lecturer on Pathological Anatomy at St. Thomas Hospital; Examiner in Pathology in the University of Oxford; Late Examiner in Medicine to the Royal College of Surgeons of England. With One Hundred and Fifty-three Illustrations.
Philadelphia: Lea Brothers & Co.
Detroit: John Macfarlane.

This is a new book. An examination of its contents does not, however, reveal its *raison*

d'être in anything especially new in the matter which it discusses. The feature of the book consists in its adaptation of existing knowledge of pathology to the needs of the practitioner. The author has been quite successful in this effort. He has given more especial attention to the subject of etiology than is customary in works of this nature, and an important place has been in the causation of disease to the influence of germs, the ptomaines and the cadaveric alkaloids. The author is not, however, dominated by the germ theory. While being quite exhaustive touching the presence of the various microzynes in disease he does not in every instance associate them in a causative relation. But in the case of the tubercle bacillus he is committal and declares tuberculosis to be a specific infective disease, that all agents which produce tubercle contain the bacillus, and that this, therefore, is the only essential cause of the disease. This declaration is made after a critical review of the proofs. The chapter on fever is particularly practical, and while discussing the various theories of fever refers also to the action of antipyretics. On the whole the book is one to be commended as especially adapted to the needs of the student.

TRANSACTIONS OF THE MICHIGAN STATE MEDICAL SOCIETY. Twenty-third Annual Meeting, held in Detroit, June 14th and 15th, 1888.
Detroit: George Duffield, M. D., Secretary.

Through an inadvertence this excellent volume of proceedings, which appeared very promptly after the meeting, has remained unnoticed until now. It is not too late, however, for us to remark that it is one of the best if not, indeed, the very best of the volumes of transactions in the history of our State Medical Society, and the success of the Secretary in securing its prompt appearance cannot be too highly commended. We hope we have had an end of the exasperating delays in the appearance of these annual proceedings which have been the rule heretofore. The papers in the volume before us are quite worthy of the profession of this State, and it is a pity that they have not received a wider circulation than that afforded by the limited number of the published volumes of the proceedings.

VISITING LISTS.

The following visiting lists are ready for 1889 and copies thereof has been received. They have all been before the profession for several years and their merits have thus been tested: The Medical News Visiting List, issued by LEA BROTHERS & Co., Philadelphia; Leonard's Visiting List, by DR. C. HENRI LEONARD, Detroit; The Physician's Visiting List (38th year), by P. BLAKISTON, SON & Co., Philadelphia; The N. Y. Medical Journal Visiting List, by D. APPLETON & Co., New York. The latter is a departure from the usual style and forms a complete account book.

Therapeutic Brevities.

HYDRASTIS CANADENSIS IN UTERINE HÆMORRHAGE.—GIVOPISZEW, having made numerous clinical observations and experiments with animals, has reached the following conclusions:

1. Hydrastis canadensis is an excellent remedy for uterine hemorrhages due to inflammation and to false positions of that organ, as well as for the hemorrhages incident to the menopause, and in the case of excessive menstrual flow.

2.—The uterine contractions produced by hydrastis are less intense than those produced by ergot.

3. Its use has no injurious effect upon the organism. Taken even for some length of time, it causes no gastro-intestinal disturbance; on the contrary, it often controls dyspepsia which has formerly existed.—*L' Union Médicale du Canada.*

GASTRIC CATARRH.—DR. WAUGH, of Philadelphia, says it is singular that catarrh is so often called dyspepsia, and that patients are thus treated wrongly numberless times. Dyspepsia is, compared with catarrh, a rare disease. Here is a combination of medicaments which, he says, is of great service in most catarrhs:

℞ Sodii carbonatis, ʒ ij.
Vini ipecacuanhæ,
Extracti rhei fluidi, ää f ʒ ij.
Syrupi rhei, q. s., ad. f ℥ iij.

M. Sig. ʒ ij in a glass of hot water an hour before meals.

The soda dissolves the coating of mucus in the stomach. Ipecac in small doses increases the gastric juice. Rhubarb carries off by the bowels the morbid products, and in addition increases the flow of the intestinal juices. The prescription is not to be continued too long, lest the patiets become debilitated.

CHLOR-ANODYNE IN HICCOUGH.—DR. GILLETT, of Aurora, Ills., reports that he has found chlor-anodyne to be a grand good thing in hiccoughs. He states that a patient who is very subject to this, came to him with a bad attack. He had had it for thirty-six hours steady and strong. He further says: "I had heretofore almost exhausted my resources on him, so I just gave him a good dose of chlor-anodyne, and it worked like a charm, almost instantly relieving him."

A Safe Antiseptic Solution.—Dr. Emil Rotter (Centralbl. for Chirurgie—Medical Record) recommends the following as a safe and non-irritating antiseptic solution, being more effective as a microbicide than corrosive sublimate of the strength of 1 to 1000:

℞ Corrosive sublimate, 0.05 (1 to 20,000, gr. j).
Sodii chlorid., 0.25 (gr. vss).
Acid. carbolic, 2.00 (gr. xxx).
Zinci chlorid.,
Zinci carbolat., ää 5.00 (ʒ j ¼).
Acid. boric., 3.00 (gr. xlv).
Acid. salicylic., 0.60 (gr. x).
Thymoli, 0.10 (♏ij).
Acidi citrici 0.10 (gr. ij)
Aquam, q. s. ad 1,000.00.
M.

Herpes Zoster.—For a case of unilateral "shingles" of the right intercostal region, Dr. Shoemaker, of Philadelphia, gives this treatment:

℞ Ferri pyrophosphatis, gr. xxx.
Acidi arseniosis, gr. j.
Quininæ sulphatis, gr. xxx.

Ft. pilulæ in no. xxx.
Sig. Take one, ter in die.

Apply the following ointment:

℞ Unguenti hydrargyri oleatis,
Unguenti aquæ rosæ, ää ʒ j.

For Chronic Rheumatism.—Dr. R. R. Mitchell sends us the following formulæ for publication:

A number of my physician friends are using the following formula for chronic rheumatism, apparently with good results:

℞ Fl. ext. manaca, f ʒ j.
Fl. ext. cascara sagrada (℞ '87), f ʒ ss.
Syr. trifolium comp., q. s. ad f ʒ iv.

M. Sig.—Dose, one to two teaspoonfuls four times a day half an hour before meals.

Tonic Laxative.—I respectfully submit the following formula which I have known to prove of unexceptional value as a tonic-digestive-laxative.

℞ Pepsinum purum pulvis,
Cascarin,
Quinine sulphate, ää gr. xxx.

M. Ft. capsules No. xxx.
Sig.—One capsule at meal time as needed.

Another formula, a modification of the foregoing, I have seen do excellent service in the treatment of simple stomach and intestinal derangements of children and adults:

℞ Pepsinum purum in Lamellis,
Cascarin, ää grs. xv.
Syr. simp.,
Aquam, q. s. ad f ʒ ij.

M. Sig.—Dose, one-half to one teaspoonful at mealtime, or as may be required.

A Pill for Gout.—The following formula is suggested by Dr. Loomis, of New York:

℞ Ext. colchici acetici,
Ext. aloe,
Pulv. ipecac.,
Hydrarg. chlor. mit., ää gr. i.
Ext. nucis vom., gr. ¼ ad ½.

M Sig. Ft. pil. No. 1. To be taken every four hours, until it purges.

These pills may be carried about and employed at the first sign of an attack: they will often abort it.

Cholera Infantum.—

℞ Argenti nitrat., gr. j.
Acid nitric. dil., ♏viij.
Tinct. opii deodorat., ♏viij.
Mucil. acacia, f ʒ ss.
Syr. simpilicis, f ʒ ss.
Aq. cinnamoni, f ʒ j.

M. Sig.—A teaspoonful every three, four or six hours to a child one year old.—Bartholow.

For Superficial Neuralgias.—Garretson's favorite application for superficial neuralgias, especially of the face:

℞ Aconitini, gr. ij.
Veratrini, gr. iv.
Olei tiglii, gtt. ij.
Olei olivæ, ʒ ij.

M. Sig.—Rub over the affected spot thrice daily.—*Medical Summary.*

A safe, pleasant, and effective remedy for neurasthenia, cephalalgia, nervousness, insomnia, etc.:

℞ Caffein citras, gr. xvj.
Antipyrin, ʒ ij.
El. sodium bromid., f ʒ ij.

M. Sig.—Teaspoonful every two hours till relieved.—E. Bories, M. D., Dayton, Wash. Ter., in *Medical Summary.*

Anodyne Liniment.—

℞ Chlorali hydratis, ʒ ii.
Linimenti saponis, ʒ iv.
M.

Medical Progress.

CHEKAN (*Eugenia Chequen*, Molino).—This plant, which has been figured but twice, and then in publications largely inaccessible to our students, is here figured from specimens of my own collection, in 1885, in the vicinity of Valparaiso.

The species abounds in that locality, and extends thence northward into Bolivia, and probably into Peru. In Chili its favorite habitat is the sandy river-beds, at a small altitude, with the Boldo and Swamp-willows for its ever-present companions; but as it passes northward into a warmer climate, it is forced gradually upward upon the cooler mountain slopes, until at La Paz we find it growing at an elevation of some 10,000 to 11,000 feet. Here, while readily recognized, it presents variations from the southern, low-land form. While it acquires, near the sea-level, almost the proportions of a tree, being sometimes 12 or 15 feet high, upon the mountain slopes of Bolivia it rarely reaches a height of 5 feet, and is of a denser and more shrubby growth. The leaves are smaller, somewhat broader and thicker, and more abundantly furnished with oil-glands, the latter a provision to shelter them more effectually against the more severe and long-continued drouths. This character adds materially to the medicinal activity of the high-land leaf.

I have not learned that the leaves are put to any medicinal use by the natives of Bolivia, though such is probably the case, as the plant is carried as a symbol in certain of their religious processions. But in Chili the knowledge of its virtues as a remedy for bronchial diseases dates from very far back in history. Like its congener, *Eugenia multiflora*, H. & A. ("*Pitra*") it is also used as a stimulating addition to hot baths in rheumatism. The fresh juice, mixed with water, is a favorite domestic application in conjunctivitis. Its properties are believed to have been first made known professionally by Dr. Dessauer, of the German Hospital in Valparaiso. Dr. Wm. Murrell, of London, then published in England an account of its properties at about the same time that Messrs. Parke, Davis & Co., introduced it into practice in the United States. Since then its special action has become much better known, and its use has steadily increased, until at present it is held by a large class of practitioners to be their most reliable remedy in a certain class of bronchial troubles. This class is specially characterized by atony or "weakness" of the bronchial mucous membrane. Its subjects are very prone to contract colds on the slightest exposure, and these do not yield readily to treatment, as their improvement is transitory. They are usually troubled more or less with catarrh, are constantly hawking to clear the throat, and very often troubled with shortness of breath. In such cases cheken is the remedy *par excellence*.

A large part of the failures which attend trials of those new drugs which have been advisedly introduced on the basis of favorable botanical, chemical and physiological considerations, follow from their injudicious or indiscriminate application to the cases. Chekan is not adapted, by itself, to the treatment of acute colds or active bronchial inflammations, and any physician exhibiting it for these indications is pretty certain to meet with disappointment. But properly administered in chronic catarrhs, particularly in weak, poorly nourished or aged parents, it should never meet with failure. There is, strictly speaking, no other drug so directly adapted to the treatment of such cases.

Explanation of cut.—Flowering branch of *Eugenia chequen*, natural size. The irregularity in the petals is due to the figure having been made from a dry specimen.

The selection of the case is no more important than the method of dosage. If the physician has not confidence that his patient will be faithful and persevering in its use he can not hope for any marked result. One teaspoonful, increased to three or four, of the fluid extract should be given in wine, spirit, or even a small quantity of water, in the middle of the forenoon and afternoon, and especially at bed-time. Where these hours are impracticable it should be given as much as possible in advance of the meals. On special indication it is happily combined with the more stimulating expectorants.

It does good service in gastric and intestinal catarrh, and is a general tonic of no mean rank.

The botanical classification of chekan is somewhat obscure, and its synonomy slightly confused, owing to the great similarity between the genera *Eugenia* and *Myrtus*, and the close resemblance of *E. Chequen* to several other species. I append an account of the genus *Eugenia*, and its relations with *Myrtus*. From this it will be seen that the only absolute marks of distinction are found in the structure of the seeds. These characters, however, are so obscure that botanists did not think of appealing to them until it became evident, as species multiplied, that the more obvious characters on which the genera were originally separated, were inconstant and unreliable. Next to the seeds the best mark of distinction is found in the character of the inflorescence. It is owing to these differences that our plant has been at various times called *Myrtus Chekan*, Feuill, *M. luma*, Schauer, and *M. dives*, Kze. Even at the present time, never having seen mature seeds, I am in doubt as to whether it is really a *Myrtus* or a *Eugenia*, and it is not at all certain that these two genera can be maintained apart.

The constituents and properties of chekan correspond with those which generally characterize the family Myrtaceæ. To this family belong the cloves, allspice, *Eucalyptus* and jambul, all characterized by the possession, in the part used, of stores of aromatic oil to which, at least in great part, are due their valuable properties.

"*Eugenia*, L. Gen. n. 616.—Calyx tube elongated globose-ovoid or turbinate, either not, or more or less, produced beyond the ovary; segments of the limb 4, produced very rarely 5, distinct, sometimes amply imbricated, and sometimes short, or scarcely standing out upon the truncate margin. Petals 4, very rarely 5 to indefinite, or none, spreading and distinct, or more or less connivant into a calyptra. Stamens many, indefinitely serialled, free, or at the base somewhat connate, in 4 fasiculæ, the filaments filiform; anthers versatile, usually small, the cells longitudinally dehiscent, almost always parallel, but occasionally divaricate. Ovary 2- to very rarely 3 celled; style filiform, stigma small; ovules indefinite in the cells, (in the section *Myrciaria* 2 to 4) affixed to the placentæ (which are but slightly distinguished from the septum) usually incurved ascending. Berry subdrupaceous or pulpy, rarely sub-dry or corky fibrous, crowned by the persistent calyx-limb, or rarely truncate by the deciduous limb. Seeds few, usually one to four, globose or variously compressing one another, the shell membranaceous or cartilaginous; embyro fleshy-thickened, the radicle short, the cotyledons more or less thickened, united or distinct, hemispherical or heteroform. Trees or shrubs, smooth or rarely tomentose or villose. Leaves opposite (perhaps alternate in one species) coriaceous or membranaceous, feather-veined. Inflorescence now centripetal, the pedicles one-flowered, disposed opposite to the axils, solitary, fasicled, or in short leafless racemes, and again centrifugal, disposed in dense terminal panicles, or in terminal or lateral cymes. Bracts and bractlets perusually small and caducous, rarely foliaceous persistent.

Described species more than 700, of which 500 seem to us to be good, growing most abundantly in tropical and sub-tropical America and tropical Asia, and fewer in Australia and Africa; a very vast genus, who limits are highly uncertain, and the species most difficult to extricate. From *Myrtus* distinguished solely by the embryo, and the Andean and Chilian species for the most part previously described under *Eugenia*, from their four-merous flowers, now transferred to Myrtus on examination of their seeds."—B. & H., in Gen. Plant, vol. 1, p. 718.

The description of *Myrtus* on p. 714 is almost identical, except that the embryo is "hippocrepious or but little involute, the radicle very long, terete, the cotyledons much shorter and occasionally minute," and "peduncles axillary, usually slender, one-flowered, or centrifugally three to seven, very rarely many-flowered, the central flowers shortly, the lateral long, pedicelled."—H. H. Rusby, in *Druggists' Bulletin*, Nov., 1888.

HABITUAL CONSTIPATION IN CHILDREN.—Dr. Eustace Smith (British Medical Journal, July 7, 1888) enumerates the causes of habitual constipation in children as follows:

First. Improper feeding. An excess of starch or of any article which overtaxes the digestive power may burden the alimentary canal with a large undigested residue and thus set up a costive habit.

By such means a mild catarrh of the intestinal mucous membrane is excited and maintained. There is an excess of mucus, and the fæcal masses, rendered slimy by the secretions of the bowel, so that this slips ineffectually over their surface.

Second. Dryness of the stools. Even in the youngest infants the evacuations may sometimes be seen to consist of small, hard, round balls, like sheep's dung. This form of costiveness is generally due to insufficiency of fluid taken. The food is made too thick, or the needs of the system in the matter of water are overlooked. But, whether the constipation be due originally to excess of mucus or deficiency of fluid, it cannot continue long without affecting injuriously the peristaltic movement of the bowels. As the colon grows accustomed to be overloaded, the intestinal contents can no longer exert a sufficiently stimulating influence upon the lining membrane, and the muscular contractions begin to flag. If the infant be badly nourished, this languor of muscular contraction may be aggravated by actual weakness of the muscular walls; and as, under these conditions, the bowel is apt to be overdistended by accumulation of its fæcal contents, the expulsive force at the disposal of the patient is seriously impaired. Constipation due to the above-mentioned causes is often made more serious by the infant's own efforts to delay relief. A baby whose motions are habitually costive knows well the suffering which undue distension of the sphincter will entail, and often yields to the desire to go to stool only when it is no longer possible to resist. The pain is sometimes aggravated by the formation of little fissures, and the violent action of the sphincter, set up by their presence, forms an additional impediment to free evacuation.

Third. The use of opium, generally given secretly by the nurse for her own purposes.

So long as the sedative is given, the bowels are costive, the child often vomits, his relish for food in great part disappears, and he lies, with pupils firmly contracted, in a dull, heavy state, from which he can not easily be roused.

An infant whose bowels are habitually costive is not necessarily injured by the want of daily relief. Often the child seems perfectly well, and, except for occasional local discomfort when he gets rid of an unusually large or hard mass, may appear to suffer no inconvenience at all. In other cases there is flatulent distention or frequent colicky pain, the child sleeps badly, has a furred tongue, and cares little for his food; the motions are often light-colored from undigested curd, and are passed with violent straining efforts, during which the bowel may prolapse or the navel start. This straining is not an uncommon cause of hernia. In relieving this condition, attention to the feeding and clothing of the baby are of little less moment than the use of drugs. When the infant is at the breast a teaspoonful of syrup given three or four times a day before a meal will often quickly restore the normal regularity of the bowels. If the stools are habitually dry and hard, the child should take a sufficiency of liquid with his food. In addition, it is useful now and then to make him drink some plain filtered water. In the case of a baby in arms, the possibility that the child may be thirsty and not hungry seems rarely to be entertained; but in warm weather, when the skin is acting freely, the suffering among young babies from want of water must often be acute. At such times the urine is apt to be scanty and high-colored, and may deposit a streak of uric acid on the diaper. When fluid is supplied, the secretion both from the bowels and kidneys quickly become more healthy; and a dessert-spoonful of some natural aperient water, given at night, aids the return of the stools to their natural consistence.

The form of constipation due to mild intestinal catarrh is common enough in young infants. This is owing, no doubt, in great measure, to over abundant feeding with starchy matters, or to the giving of cow's milk without taking due precautions to insure a fine division of the curd. Still, it can not be denied that we sometimes find the same derangement in infants whose diet is regulated with proper judgment. In them the intestinal catarrh is often the result of exposure, for the sudden withdrawal of all protection from the legs and belly which the process known as "short-coating" too commonly involves, is a fruitful cause of chill. Under such sonditions the bowels are, no doubt, often kept in a state of continued catarrh from rapidly recurring impressions of cold. When constipation is due to this cause our first care must be to protect the child's sensitive body so as to put a stop to the series of catarrhs. To do this it will not be sufficient to swathe the belly in flannel. The legs and thighs must also be covered, for so long as a square inch of surface is left bare the protection of the child is imcomplete. The infant's diet must next be regulated with due regard to its powers of digestion. Excess of starch must be corrected, and it is best to have recourse to one of the malted foods. Mellin's food is especially valuable in cases where there is this tendency to constipation, as in many children the food has a very laxative effect; but, as Mellin's food contains no unconverted starch and can do nothing to prevent the formation of a dense clot when the curd coagulates in the child's stomach, it is advisable, when giving it with milk, to insure a fine division of the curd by the addition of some thickening material, such as barley-water. A certain variety in the diet is of importance in all cases where the digestive power is temporarily impaired. Therefore it is advisable to order an additional food to be given alternately with the Mellin and milk. Benger's "self-digesting food" is useful for this purpose, and rarely disagrees. It must be given, like the Mellin, with cow's milk, but without the barley-water, for the pancreatin it contains has a digestive action on the curd and removes the tendency of the latter to firm coagulation. In addition to the above, if the child has reached the age of ten months, he may take a meal of veal-broth or beef-tea once a day, and with this it is advisable to give some vegetable, such as broccoli or asparagus, thoroughly well boiled. At this age, too, the milk of the morning meal may be thickened with a teaspoonful of fine oatmeal and sweetened with a teaspoonful of malt extract. In the case of many infants suffering from habitual constipation, the appetite is very poor, and great difficulty is found in persuading them to take a sufficient quantity of nourishment. This indifference to food is almost invariably associated with coldness of the extremities, and usually disappears when measures are taken to supply necessary warmth to the feet and legs.

In addition to the regulation of diet and clothing, the bowels should be regularly stimulated by manipulation. The sluggishness of peristaltic action may be very materially quickened by judiciously applied frictions. The nurse should be directed to rub the child's belly every morning after the bath. She should use the palm of the hand and ball of the thumb, and, pressing gently down upon the right side of the abdomen, carry the hand slowly around in a circular direction, following the course of the colon. The frictions may be continued for five minutes. In obstinate cases the child may be placed upon the bed, and the bowels gently kneaded with the thumbs placed side by side, the movements following the course of the colon.

In addition to the above-mentioned general treatment, more especial measures may be necessary. These may be divided into suppositories and enemata, and medicines given by the mouth. The time-honored piece of Castile soap for a suppository is recommended, and the now popular enema of thirty or forty drops of pure glycerin. Large enemata of soap and water should be used only rarely, as great dilatation of the rectum and permanent loss of muscular tone are very apt to follow their continued use.

For the permanent cure of habitual constipation, remedies given by the mouth are greatly to be preferred, but strong purgatives are worse than useless. The aim should be to find the smallest dose which will awaken a normal degree of peristalsis, and to give this dose regularly so as to excite a habit of daily evacuation. The daily dose is most efficient when combined with a remedy which tends to give tone to the muscular coat of the bowel. For this purpose a useful draught is composed of

half a drop of tincture of nux vomica, combined with ten drops of tincture of belladonna and twenty of infusion of senna, made up to a fluidrachm with infusion of calumba. This should be given at first three times a day before food, and subsequently reduced to twice, and then to once daily. The liquid extract of cascara is useful in many cases, especially when combined with tincture of belladonna. Twenty, thirty, or more drops of cascara extract, with ten of tincture of belladonna, may be given with a few drops of glycerin every night, it is often efficacious.

When the motions are drier than normal, a saline may be given in addition to the liquid already recommended to be added to the diet. The saline may be combined with small doses of nux vomica and quinine. For a baby of five or six months, five to ten grains of sulphate of sodium may be given with a quarter of a grain of quinine, half a drop of tincture of nux vomica, and a minim of aromatic sulphuric acid, in a teaspoonful of water, three times a day before food. If the remedy has been well chosen, its quantity may soon be diminished, and finally it may be discontinued.—*N. Y. Med. Jnl.*

CASES ILLUSTRATING THE SEDATIVE ACTION OF PICHI ON GENITO-URINARY TRACT*.—In Chili, pichi is much employed in the treatment of urinary disease with considerable success, particularly when there is irritation from the presence of gravel or calculi, or there is an uric acid diathesis. It is also claimed to be of use in dyspepsia. In this disease I have not tried it, nor can I give any indications to govern its employment.

My mode of administration has been as follows: from fifteen to thirty drops in one-half glass of water, a tablespoonful every one or two hours, or ten drops, four times daily, in vichy.

Case 1.—Mrs. B——, 60, patient at the Helmuth House, for a phosphatic calculus. The stone was crushed and the bladder washed by Bigelow's evacuator. Before her admission, because of the irritation from the stone, the patient had been obliged to urinate frequently, passing a small quantity of water only each time. She was also troubled with a constant pain in her back and considerable tenesmus of the bladder.

Operation, December 13th. Immediately after the operation an opium suppository was inserted. December 14th, passes but little urine, amounting to less than a pint, very high color. Pain in the back much better. December 15th, *pichi* ordered and the urine measured eighteen ounces. Tenesmus much less. 16th, quantity twenty ounces; 17th, quantity thirty-one ounces; 19th. thirty-six ounces; 22d, forty-seven ounces. After the third day all tenesmus ceased, and during her stay the quantity never fell below thirty-three ounces.

Case 2.—Mrs. X——, 65, a patient at the Helmuth House, from whom some time previously an epithelioma of the vulva had been removed, and who was suffering from a chronic cystitis, and also a urethral irritation caused by a return of the growth pressing upon the meatus. The patient was accustomed to take two glasses of Poland water daily before she came to the hospital, and kept it up during most of her stay, so that it was a constant quantity. We were also obliged to wash out her bladder once or twice daily. This had the effect of lessening the tenesmus for a time, but not permanently. Her urine was at times loaded with pus, and she was compelled to pass it frequently, especially at night. The quantity up to the time of her arrival was about thirty ounces daily. December 16th, two days after her arrival, quantity, forty; December 17th, forty-six; December 19th, forty-seven. On the 20th *pichi* was omitted, when the quantity fell to twenty-four ounces. The next day it was again resumed, when it rose to forty-five. A few days after, as a matter of experiment, *bitartrate of potash* was substituted for *pichi*, and the quantity fell to thirty-five, then twenty-eight, then twenty-four. On resuming the *pichi* the quantity again rose. On January 14th I directed the nurse to take the sp. gr, of the daily urine, as well as the quantity. It varied from 1010–1020 and not always in proportion with the quantity. For instance, with fifty-seven ounces, 1010, and then 1010 with thirty-seven ounces. On January 14th part of her fluid diet, the Poland water, was stopped, with the result of reducing the average quantity of urine ten ounces, about equal to the amount of fluid taken away. January 21st the sp. gr. was 1020, and the next day, with the same quantity, a sp. gr. of only 1010.

At this time the patient was greatly improved in both her general health and local condition. The appearance of the growth was much better (due to local treatment directed to it alone), she spent very comfortable nights, the pain upon passing water amounted to almost nothing, the tenesmus ceased, and she was treated to but one washing of the bladder daily, with only an occasional discharge of pus. January 24th she considered herself well enough to leave the Helmuth House, and since then her medical attendant has reported her improvement as permanent.

Case 3.—Mrs. D——, 45, at the Helmuth House, from whom the left breast had been removed for a cystic growth. About a week after her operation she complained of frequency of urination, with burning pain in passing water and a considerable tenesmus after. Urine was high colored, scanty, no albumen. *Acon.*, *hyoscy.*, *can. sat.*, *cantharis*, were tried, but gave no relief. *Pichi* was then tried, relieving the symptoms immediately, increasing the quantity of urine, and restoring it to the normal condition. There was no return of the trouble. Urine of first twenty-four hours after the administration of *pichi*, twenty ounces; sp. gr., 1010; second twenty-four hours, thirty ounces; sp. gr., 1020; and so on from that time.

Case 4.—Mrs. S., 30, amputation of breast for cystic growth, at Helmuth House. For several days after her operation the patient was unable to empty her bladder. Remedies and various expedients, as hot cloths to vulva, dripping of water, changing of position, etc., were resorted to without bringing about the desired result. so recourse was had to the catheter. In eight or ten days this difficulty passed away, and almost immediately there set in a train of distressing symptoms due probably to irritation from the catheter, though every precaution had been taken to prevent them.

* Read before the New York Society for Medico-Scientific Investigation, by S. H. Knight, M. D.

I administered pichi and the symptoms subsided; again, after stopping the drug for a day or two, the same symptoms occurred, only aggravated, and I hesitated as to whether I should have her bladder washed out, as there was considerable sediment in the urine. However, I determined to try pichi alone, and in forty-eight hours all symptoms had gone to return no more and the urine was perfectly normal.

Case 5.—Mrs. ——. This case was reported to me by Dr. W. T. Helmuth, Jr., as occurring in his practice. The patient was suffering from pelvic inflammation with frequency of urination, quantity scanty, high color, copious sediment of urates. There was no albumin nor anything to indicate any organic trouble with bladder or kidneys. Dr. Helmuth prescribed pichi, and at his next visit after the lapse of one day the urinary difficulty had subsided, though the pelvic inflammation was still present.

Case 6.—Mr. E., a patient in my private practice. He had for some time been using malt liquors freely, and then a few days before his visit left them off suddenly, with the result of diminishing a flow of urine already beyond normal, to about 28 oz. in twenty-four hours, sp. gr. 1030; highly acid, reddish brown; no albumen, microscope showed no organic trouble with kidney. A most distressing symptom was a constant pain in the back. Under the administration of pichi in two days there was an entire cessation of the pain, and the urine had returned gradually to the normal quantity and condition.

Case 7.—Is one condensed from a report in the Therapeutic Gazette, but showing so well the action of the drug and the field it covers, that I will venture to give it you. The patient, a young man 28, had a gonorrhœa and was suffering from a vesical catarrh of two years' duration; urine alkaline, ropy, ammoniacal, with pus. Urinated every hour in day and four or five times at night. Different remedies were administered with no effect. Resort was then had to washing the bladder, which slightly relieved him, but every exposure made him worse. State of affairs continued a year and a half. At this time pichi was administered by his physician, with the result of so bettering his symptoms in a few days, that he was obliged to rise twice only, at night. For some reason a fresh supply could not be obtained and the patient grew worse. Upon resuming the medicine, he commenced to improve, and in a few weeks washing of the bladder was abandoned, and to-day he is perfectly well.

From these few cases, we find that the drug has a diuretic action, though not a very active one.

We notice readily the remarbably effective action as a sedative upon the irritated urinary passages. Particularly is that seen in cases 3, 4 and 5. In cases where a febrile, highly acid concentrated urine brings about a sensitive condition of the bladder and urethra, with its accompanying spasmodic action bordering upon a true inflammation, it seems to act as a specific.

That it is efficacious in a chronic inflammatory condition of the bladder, cases 1, 2 and 7 show very plainly. In acute cystitis I have as yet had no opportunity to try the remedy, but I should not hesitate to recommend it.

The remedy is recommended for cases showing a lithæmic condition, and I have several cases of that nature in my dispensary and private practice under observation, but as yet there has not been time enough to achieve any definite results.

That the remedy has any influence in organic diseases of the kidney, I believe, is not claimed.

I must apologize for my somewhat hasty generalizations, and more or less unscientific methods of investigation; but I have had the remedy under observation only a short time, and many of the patients have been such, that it has been necessary to resort to means for their temporary relief, even if those means seemed to interfere with the object I had in view, namely, the definite action of the remedy under observation. If I have, however, interested any member of the society sufficiently to try the drug, I believe it will prove a source of great relief in many a trying case. I would suggest that a trial be given in cases of gonorrhœa and acute cystitis. If the committee on drug proving care to put it on their list, then the precise limits of its beneficial action may be marked out.—*American Jour. of Homœopathy*, July, 1888.

THERAPEUTIC INDICATIONS FOR THE USE OF CANNABIS INDICA.—For several years the writer has given some attention to the study of the clinical value and applications of cannabis indica, and now, that this drug is receiving somewhat more attention on the part of physicians than heretofore, it may be well to place before the profession a portion of the results of this observation. This disposition is further prompted by reason of the fact that many times this remedy is used in combination with other drugs, and all the credit is given to the one under consideration. To clear up this matter, therefore, it will best suit our purpose to consider the character of these combinations which are used with cannabis indica, in order to learn what influence these different ingredients may have upon the various affections to which it has been applied. In the space at our disposal, it will be impossible to go into the whole subject fully, and the remarks will, therefore, be confined to the use of the drug in the treatment of neuralgic affectionc, and in derangements of the alimentary canal.

As long ago as the summer of 1883, the writer took exception to a practice which he has just condemned, that of giving to a single drug the credit of producing an effect which was due to a combination of drugs, a short communication appearing in one of the medical journals of that year. In that instance cannabis indica was used in combination with chloroform for the relief of menorrhagia, and all the credit was wiven to that remedy, chloroform being a factor entirely overlooked. The fact is, that both of these remedies are valuable for this affection, and they may be used with very good effect separately, but of this we shall have to speak later on, when pointing out personal experience.

This remedy has been used in India, and from there has found its way to England, and eventually has reached this country, being used in the treatment of dysentery, diarrhœa, and cholera, and in places where these diseases are unusually prevalent, the patients have become so well acquainted with the treatment that they ask for the green medicine. The

formula will be found in the Medical and Surgical Reporter (September 3, 1887). According to the formula, each dose contains not only ten minims of the tincture of cannabis indica, but there is in addition thereto the following: spirits of chloroform, ten minims; tincture of kino, one drachm; and peppermint water, one ounce. Now, we all know that either one of the above adjuvants are valuable remedies when properly used. Chloroform is an important ingredient of chlorodyne; the tincture of kino is an active astringent, while the simple use of peppermint water will often correct diarrhœa and looseness of the bowels which ordinary treatment fails to check. This latter condition was observed in the case of an elderly gentleman coming under treatment about two years ago. For the preceding two years he had suffered greatly from looseness of the bowels, but his only reliance had been a small vial of peppermint water, and, although he took the medicine prescribed, it was necessary to reënforce its action by means of the little vial. With suitable treatment, and removal of the cause, this tendency wholly disappeared. Still another formula has been imported from India, and finds its way into the American Journal of the Medical Sciences (April, 1888). Here, as usual, cannabis indica is highly extolled as a remedy in the treatment of diarrhœa, but the dose includes, in addition to twenty minims of the tincture of this drug, ten grains of bismuth subnitrate, twenty minims of spirits of chloroform, half a drachm of mucilage acacia, and one ounce of cinnamon water. It is needless in this case to go over the same course of reasoning as that we have just finished, as the same rules apply to the one as to the other. Reference to the "Annual of the Universal Medical Sciences" does not throw much light upon this subject, except that the remedy has been used successfully in the treatment of nearly all forms of diarrhœa, but more especially in summer diarrhœa, the drug being used in combination with chloroform, morphine, and the aromatic spirits of ammonia. The same publication also mentions a paper by Mackenzie in which he reports good success with cannabis indica for the relief of headache, the dose being one-third of a grain night and morning, increasing the same as may be required. At the same time, the editor suggests that a full dose of the drug will sometimes abort an attack of migraine, but that a dose sufficient for this purpose will cause some delirium of a temporary character. It may be just as well to note here that this delirium is not always a difficulty which can be readily overcome; hence, the remedy should be used with caution. The writer met with a patient who thinking that if the dose was repeated every five minutes, the effect would be far better than when the intervals were lengthened to ten minutes. The result was that in the course of an hour she was (subjectively) walking like a fly on the ceiling, although after a night's rest all was again serene. Dr. Hare (p. 531, *loc. cit.*) finds that large doses are required to act as a poison when the remedy is administered hypodermically—a fact which is of some importance when we think of the diseases affecting the liver and kidneys, as there is a general agreement that remedies entering the system through the circulation are excreted through the kidneys, while those which are taken into the stomach reach the liver and are eliminated by that organ. We conclude, therefore, that the effect produced by the hypodermic use of cannabis indica should not be accepted as a criterion when estimating its effect when taken by the mouth, a small dose hypodermically being a large dose when taken into the stomach.

In addition to the paper already noticed on the use of cannabis indica in the treatment of migraine, Mr. Richard Greene contributes a paper (Practitioner, July, 1888), recording the results of three cases treated by him in this way, and ascribes great powers to the drug, saying that it will eventually become as valuable in the treatment of migraine as bromide of potassium is in the case of epilepsy. The dose recommended it one-third of a grain at night or both night and morning, and, as a precaution, this author says that not more than one grain should be taken at a time.

From amongst all of these observers, it will be seen that but two of them have used the drug singly, and in all of the other instances the drugs which were added were, as a rule, quite sufficient to produce the same effects which were claimed for cannabis indica, and, as a matter of course, under such conditions, the whole fabric erected upon this hypothetical foundation falls to the ground, leaving only the two pillars planted by Mackenzie and Greene, and as a contribution to this subject, the writer thinks it worth while to record his personal experience.

In the treatment of the cough of phthisis, either alone, in tablets of one-twentieth of a grain, or in combination with chloroform, it has proven an acceptable and valuable remedy. Dysmenorrhœa, marked by painful menstruation, is favorably influenced by small and frequently repeated doses of cannabis indica. Such cases occur in young girls and in married ladies even without displacement, and every month the suffering increases, until they are finally compelled to consult a physician. To relieve the pain and make the patient comfortable is the duty of the physician, and a few drops of cannabis indica is quite sufficient. Five drops of the fluid extract having been placed in a dry glass or teacup, pour upon it four or five ounces of cold water, and direct the patient to take of this solution a teaspoooful every ten minutes for the first hour, then at intervals of an hour during the remainder of the day or evening. Perhaps at the expiration of the first hour, the pain will have been materially assuaged, and in the course of a few hours the patient will be as well as ever. These attacks frequently appear just at the beginning of the menstrual molimen, and when the patient is put under the influence of cannabis indica the congestion causing the pain subsides and the flow begins. Within the past three years, at least fifty such cases have come under observation, and a failure has been the exception. Chloroform (ten or twelve drops on sugar, repeated in an hour) also answers the purpose quite as well, and may be used when convenient.

Supraorbital neuralgia has furnished its quota for treatment of this drug, and has been met by very flattering results, a majority of the cases, where a proper selection had been made, yielding readily to its influence. There may be something in the method of ad-

ministration, and directions are, therefore, appended: Prepare the remedy as in the case just stated, the same amount, the same dose, and the same period for administration, and the physician need not be surprised if the pain subsides in the course of half an hour. The same method of treatment has been found available in the case of flatulence accompanied by pain; and where the tongue is foul and coated, a plan suggests itself of combining with this drug a few drops of nux vomica tincture. Sometimes the first dose is all that is required to relieve the patient and make him quite comfortable, and apparently the relief is immediate. Upon this topic, we shall be glad to hear from our readers.—*Med. Register*, September 29, 1888.

ARREST OF EVOLUTION VERSUS MATERNAL IMPRESSIONS.—Dr. Dixson (Weekly Medical Review):

The writer is of the opinion that the evidence brought forward to support the theory, that "mental impressions upon the mother are conveyed to the fœtus in utero through the medium of the blood, and are the cause of monstrosities, amputations, nævi, etc.," is far from conclusive. He believes that demonstrated pathological, physiological and embryological truth shows that these so-called maternal impressions monstrosities, marks, etc., are the results of arrest of development or evolution, pressure by amniotic bands, pressure by umbilical cord, adhesion of the placenta, or by some pathological conditions of the fœtus or its membranes, or by heredity.

The author gives a most interesting review of the evolution of the embryo, discussing the various points at issue, and draws the following inferences:

a. That during the embryonic existence certain parts may be hindered or arrested in their development, while the other organs not directly connected with them may continue their evolution and become fully developed.

b. That ectropia viscera of the abdomen, spina bifida, cleft palate, harelip, webbed fingers and toes, etc., are only evidence of arrested development of the embryonic abdomen, spinal, and maxillary processes, or, in the case of webbed extremities, the continuation of the embryonic hand or foot of the second month.

c. That any agency causing arrest of development of any portion of the fetus must necessarily operate prior to the evolution of the part.

d. That the cause of the arrested development may be local or general, as injuries to the mother's abdomen, diseases of the uterus or its membranes, hereditary transmission of deformity.

e. That excessive development of parts of the fetus may obtain, resulting in nævi, aneurisms by anastomosis, supernumerary fingers and toes, etc.

f. That intra-uterine amputations are the results of amniotic bands, placental adhesions, fracture, or from constriction by a loop of the umbilical cord.

g. That amniotic bands or placental adhesions result from inflammation of the uterus, its decidua, or inflammatory diseases of the fetus.

h. That the false membranes causing these amputations may be afterwards absorbed, as also the amputated extremity.

i. That so-called double monsters are the result of the development of a double cicatricula on the blastodermic membrane of a single ovum.

j. That twins with a common chorion also result from the development of a double cicatricula on the blastodermic membrane of a single ovum.

k. That in either case there is always unity of sex.

l. That the nearness of the primitive traces to each other determines whether the impregnation will result in separate twins or a double monster.

m. That in twins with single chorion or anastomosis of placental vessels, one fetus may become perfectly formed while the other becomes monstrous.

n. That the development in such cases of the abnormality, depends on local anatomical causes, and is governed by definite laws.

o. That every known form of malformation in the human race has its analogue in the lower animals, birds, fishes and reptiles.

p. That arrest of development at any of the stages of embryonic life results, in a permanent embryo of the stage at which the arrest took place.

From the consideration of all these facts, the subject is narrowed down to the following questions,—viz.:

Can the mother's mind produce the diseases of the uterus or its membranes which result in false bands or placental adhesions which cause amputations and other deformities?

Can such impressions cause the umbilical cord to encircle and amputate a limb, or cause the death of the fetus?

Can such impressions reach and act upon the newly impregnated ovum so as to cause the double cicatricula to approach each other so closely as to result in union and double monsters?

Is it possible for maternal influence to destroy or deform one fetus in utero, while another enclosed in the same membranes is uninjured?

A large percentage of congenital deformities being shown to arise from local and other causes which can have no connection with maternal influence, is it probable that at another time exactly the same deformity is produced by maternal impressions?

Is it reasonable that an intra-uterine amputation will be caused in one case by an amniotic band, while in another it may be caused by maternal impressions?

When it is remembered that no nervous connection exists between the embryo and the mother, that there is no distinct blood communication, that the mother's mind can have no influence in causing pathological conditions which have been shown to be the cause of the malformation, that during the first week of fœtal life the ovum is surrounded by anatomical conditions precluding maternal influence, whereas it has been shown that the vast majority of malformations have their origin in that period of embryonic life in which the ovum is still homogeneous blastema; when all these facts are considered, can any one believe that the mother's mind can change the conformation of the fœtus in utero?

RHUS AROMATICA AND CHIONANTHUS IN DIABETES.—A very typical case of diabetes insip., which I attended, in 1880, was completely cured in the course of four months by rhus aromatica. My patient had fifteen drops, four times daily, during the first month, and thereafter the same dose three times daily, taken in a little water. All the symptoms of hydruria were well marked, particularly the large quantity of urine passed, the same measuring two gallons in twenty-four hours. It was hardly more general in character than clear water.

I should state here, though, that at the beginning of my treatment I made use of berberis aquifolium as a gastric corrective. No other remedies were called for, and hence not dispensed.

The patient, a lady of intelligence, improved nicely from the commencement of rhus aromatica treatment, and has frequently stated that this remedy saved her life. Other drugs which she had taken in large quantities, from various doctors, for several months, did not have a salutary influence.

Since the care of the above case I have had several minor cases; have not failed in any with the remedy mentioned. What could be accomplished in diabetes mellitus, with the same agent, I am not prepared to say. Most certainly, however, rhus has a "specific" correcting action upon the excretory tissues of the kidney.

The chionanthus is certainly the most promising remedy I have used, and it is my universal prescription in jaundice; have met with but few failures. In infantile jaundice, I believe it never fails, and we know well that some of these little folks' cases baffle us as well as the old grannies that preceded us. It stands to reason that neither chionanthus nor any other remedy will remove the super-abundance of coloring matter which is brought about by malignant growths of the structure of the liver, particularly involving the excretory duct. Nor would I anticipate the most brilliant effects where the jaundice is due to severe cerebral lesion.—G. A. Mueller, M. D., in *Chicago Med. Times*, Oct., 1888.

CHLORIDE OF AMMONIUM IN NEURALGIA.—Three weeks since a lady called at my house in the evening to ask me to attend her in her approaching confinement, when her husband, who accompanied her, said: "I suppose you can't do anything for me?" I replied that that would, of course, depend upon what was the matter with him. He then told me that he had been suffering from neuralgia in the head and neck, left side, for fifteen weeks without a day's intermission, and that the pain was getting worse instead of better, so that at times he felt as if he must "go out of his mind."

I asked him what he had been doing for his complaint, and he told me that he had been prescribed for by several medical men, whose names he mentioned, with scarcely any alleviation, even temporary, of his sufferings.

"What did they give you?" was my next inquiry, which he answered by producing a bundle of prescriptions which all rang the changes upon sulphate of magnesia, quinine and iron, in variations more or less elaborate combinations. "They have not done me a bit of good," he said, emphatically; "can you give me anything else?"

I said I could and made him up a mixture of chloride of ammonium, twenty grains to the dose, which he took away with him. The next evening the gentleman called to say that he had taken what I had given him, and, for the first time for fifteen weeks, had passed a day without pain, having felt an improvement after taking the first dose of the medicine.

He begged for another bottle as he was afraid the neuralgia might return, so I gave it to him, but he did not take the whole of it, and has had no return of the neuralgia since.

Chloride of ammonium is a very simple, most valuable, and strangely neglected drug, which I have never known to fail in the treatment of neuralgia.—W. T. Greene, A. M., M. D., T. C. D., in the *Medical Press and Circular*.

THUJA OCCIDENTALIS IN CANCER.—In one of the recent sessions of the Paris "Soc. de Med. Pract.," Dr. Baratoux recommended the alcoholic tincture of thuja occidentalis L., for the palliative treatment of cancerous affections. He begins with the daily administration of 20 drops of the tincture, and increases the dose up to 3.0 to 4.0 a day. Simultaneously with the internal administration, the affected portions attacked by the carcinoma are penciled with the tincture, and besides, at intervals of two to three days covered with a spray, prepared according to the following prescription:

℞ Tinct. thujæ occident., 5.0.
Aq. destill., 100.0.
Glycerin. pur. destill., 10.0.

In application of the remedy mentioned, the disagreeable smell of the pathological growth disappears in a few days, the secretion of pus diminishes, and in the course of a few weeks there is evident a decrease in the volume of the cancerous proliferations.

Dr. Dujardin-Beaumetz states, in connection with the observations of Dr. Baratoux, that the alcoholic thuja tincture is very effective in the treatment of all dermoid vegetations and degenerations, especially against warts.

The common tree of life, thuja occidentalis L., belonging to the coniferæ and indigenous to North America, is often cultivated in our sections as an ornamental plant.

The green branches, which possess a strongly balsamic, not unpleasant odor, and an aromatic bitter taste, were formerly officinal under the name of "ramuli arboris vitæ" or "frondes thujæ," as a diaphoretic and diuretic, but in respect to these properties has long been crowded out of the materia medica. H. L.

SIMULO IN EPILEPSY.—As is known, tincture simulo has been recommended in the past as an anti-epileptic and anti-hysteric, by W. H. White, and the possibility is not excluded, that the remedy will find its way into Austria. Prof. Eulenberg, of Berlin has tested the tincture with respect to therapeutic efficacy, and states with reference to the experiments instituted by him on a number of patients, in the *Therapeutischen Monatsheften*, "Aug. 1888," that the remedy is decidedly without value as an anti-hysteric, but is not without efficacy as an anti-epileptic. It cannot however, be associated with the bromine preparations.

The Medical Age.

Vol. VI. DETROIT, DECEMBER 10, 1888. No. 23.

Original Articles.

EMERGENCY HOSPITAL CLINIC.

SERVICE OF J. J. MULHERON, M. D., PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE, MICHIGAN COLLEGE OF MEDICINE AND SURGERY, DETROIT, MICH.

Dyspepsia.—This woman comes before us today complaining of dyspepsia. This is an exceedingly common ailment, but when we take into consideration the abuses which are heaped on the human stomach in modern society, the only wonder is that it is as infrequent as it is. Nature is very kind to her erring children, whom she has endowed with wonderful powers of resistance against the effects of their indiscretions. Dyspepsia has been aptly called the remorse of a guilty stomach, and it is always the legitimate effect of a cause.

Correctly speaking, dyspepsia is not a disease, but a symptom. The condition of which it is a manifestation is not, however, always discoverable, and we, thus, have no pathological changes to characterize it—it is a functional disease. True, the walls of the stomach have in some cases been found to be thinner than normal and the gastric tubules to be in a state of fatty degeneration. But, as a rule, no change can be detected.

This patient furnishes us with no history which aids us in fixing the etiology of her condition. She denies all excesses of the table, and her social condition certainly negatives the assumption that she is a high liver. But the condition may result from improper quality as well as from excessive quantity of food. It may be a consequence of inherent defect. All are not born strong, either in body or in stomach; such is the working of the inexorable law of hereditation. The woman is upwards of fifty years of age, and the weakness is, probably, one of the evidences of advancing years. She complains of the more commonly existing disturbances. Her appetite is capricious. At times it is voracious, and anon it is almost entirely lost. After a meal, she tells us, she has a sense of heavy weight, dull pain and burning in the epigastrium. She is troubled, too, with flatulence, constipation and the "blues." Occasionally she has a "bilious attack," her breath is habitually offensive, and for several hours after rising every morning "the bitter taste in her mouth" is very disagreeable. Notice the dryness of her skin and her sallow, anæmic complexion. The symptoms for which she has principally consulted us this morning are "heart-burn" and dizziness. These cause her much suffering and apprehension, and are much more important, in her mind, than the other symptoms, of which, indeed, she has not voluntarily complained, and which we have elicited only through our questioning of her.

Dyspepsia may be either a primary or secondary affection. In this case it is secondary, or, in other words, it is the local manifestation of a depraved condition of the system. The woman has passed the prime of life and her vital powers are on the wane. Her stomach as well as the voluntary muscles of her body suffer from the consequent anæmia. The digestive function of this organ being thus impaired, the original depravity of the system is in turn aggravated.

It is important in treating these cases, that the condition be not confounded with that which obtains in chronic catarrh of the stomach, or chronic inflammatory dyspepsia. The treatment best adapted to the one condition will be harmful rather than beneficial in the other, and it is to be feared that much of the unsatisfactory outcome of the treatment of gastric affections is due to failure to properly differentiate the conditions which obtain. I will briefly enumerate the points of the differentation: The inflammatory condition is always the direct result of an abuse of the stomach, and is usually traceable to the immoderate use of alcoholic stimulants. In dyspepsia the tongue is not coated, as it always is in chronic catarrh of the stomach, but is pale, flabby, and marked by indentations of the teeth. Anorexia is seldom or never complete in dyspepsia, nor is there that constant thirst which characterizes the catarrhal affections. Spices and stimulating foods frequently relieve dyspepsia, while they invariably aggravate the suffering of inflammatory dyspepsia. In dyspepsia the urine is unchanged, but it is usually cloudy and alkaline in the other disease, in which, too, it deposits urates, oxalates and phosphates.

We shall consider first the relief of the "heart-burn" of which this patient complains, with a view to the selection of the proper medication therefor. The acidity may

result from either an excess or a deficiency of the secretion of gastric juice. In excessive secretion the acidity is, of course, due to a superabundance of the normal acid, while in deficient secretion the acid is the product of fermentation, butyric acid being the most constant. The acidity of excess occurs shortly (within one hour) after the ingestion of food, while it does not occur until after the lapse of several hours when the secretion is defective. Hydrochloric acid is a valuable drug for the relief of both of these kinds of acidity, but it must be administered differently in each. Given about an hour before meals it allays that irritability on which the excessive secretion on the ingestion of food depends. Given after the meal it supplies the deficiency of the gastric juice and thus prevents fermentation by aiding digestion. It is good treatment where there is excessive secretion to give fifteen drops, in water, of dilute hydrochloric acid an hour before the meal, and immediately before to give fifteen grains of the subnitrate of bismuth. In the patient before us the "heartburn" comes on about three hours after each meal and is attended by "taste of rotten eggs." We shall order for her fifteen drops of dilute hydrochloric acid with five grains of pepsin to be taken immediately after each meal, and, to obviate the fermentation of any undigested food which may remain, we shall give twenty grains of sulphite of sodium in three hours after eating. This treatment will relieve the distressing symptoms for which the patient has come to see us, and when she comes back, in a week, we shall place her on the simple bitter tonics and iron.

Under the treatment thus ordered we hope also for improvement of the vertigo of which the woman complains. This vertigo we know is not cerebral, because the patient tells us, on inquiry, that she knows that the apparent movement of surrounding objects is increased. In cerebral vertigo the patient believes the apparent movement to be real. The occurrence of this symptom, too, in connection with the marked gastric disturbance is sufficient to establish its nature.

Sciatica.—We have here a man whose gait on entering the amphitheatre, and whose countenance cannot have escaped your notice. He is lame, and the lameness is due to the slight flexure of his right thigh on the pelvis. He is emaciated and his face bears an anxious expression, while the lines of suffering are distinct. We find his pulse accelerated, his skin hot and his tongue coated. So much for the objective symptoms. We shall now proceed to discover, by questioning him, the subjective. He complains, you hear, of a pain which we find on locating its seat commences in the hip and extends down the outside of his leg to his ankle—along the course of the sciatic nerve. This pain, he tells us, is most acute in the calf of the leg, and gives us a conception of its nature by saying that it is "like a toothache." We find on feeling along the course of the nerve that there are certain points which are peculiarly sensitive. These are behind the trochanter, and in the popliteal space. Motion aggravates the pain, which he has suffered now almost continuously for six weeks, and which has all along been of a dull, grinding character with occasional lightning-like shocks. Latterly (within the past week) he has been having, in addition, a feeling of numbness in the leg. He was taken two months ago with an attack of lumbago which left him in two weeks and was followed by the pains for which he now consults us.

These symptoms point very directly to sciatica, although they are by no means pathognomonic of this affection. The man is forty-three years of age. If he were younger, and he had consulted us earlier, we should interrogate his case more closely for the purpose of excluding incipient hip disease. We are, however, satisfied that we have a case of sciatica to deal with, any possible doubt existing being removed by the fact that this is the third attack from which he has suffered.

What shall we do for him? Had he not been under treatment at other hands for the past six weeks, we should place him on salicylate of sodium and colchicum to begin with, in addition to the more distinctly tonic treatment (including full doses of quinine) which his run-down condition calls for. Deep injections—into the very nerve itself—of the sulphate of morphine, we should also have tried, and we should have applied fly blisters, of about the size of a silver twenty-five cent piece, along the course of the nerve. He has, however, we infer from his statements, been subjected to several of these remedies and has, doubtless, received intelligent handling throughout. Previous treatment having failed we shall resort to a method of stretching the nerve without actually cutting down upon it. The usual method of stretching is to cut down midway between the trochanter and the knee and seizing the nerve on the index finger, raise it out of its bed to the height of two or three inches. By this procedure we break up any adhesions which may have resulted from the neuritis, between the nerve and its sheath. It is these adhesions which keep up the irritation, and the rupture of them is often followed by excellent results. We shall resort to another method of stretching which has been successful in a goodly number of cases. We place the patient on his back on the table and seizing the leg by the knee, flex the thigh forcibly on the pelvis, using sufficient force to bring the knee in contact with the chest. The patient tells us that

this simple procedure has given him great relief. We shall give him twenty grains of the salicylate of sodium with fifteen drops of the wine of colchicum every three hours, and will ask him to report here again in a week.

[The patient returned in a week and reported excellent results from the treatment. He was subjected to another stretching through forced flexion of the thigh and placed on a chalybeate. He did not return again and the presumption is that he recovered.]

Incipient Phthisis.—This young man is twenty-eight years of age. He has for several months been troubled with a short cough with a tenacious sputum, from which he has got no relief, in spite of numerous cough-mixtures which have been prescribed for him. We strip his chest to the skin and proceed to interrogate it through the medium of the physical signs, in order to discover the seat of irritation. Never attempt to make a careful physical examination through even a fine undershirt. We notice first, on inspection, that the patient is somewhat emaciated. Observe, too, the diminished movement of the upper part of the left side of the chest, as compared with the movement of the corresponding region of the right side. The thermometer, under the tongue, shows a temperature of 101°, and we have already had our suspicions aroused regarding trouble in the lung. On percussion of the clavicular and infra-clavicular regions, if your ears are sharp, you detect the diminished resonance on the left side, as compared with the right. Auscultation does not reveal any rales or other of the grosser changes characteristic of the more advanced stages of phthisis. The respiratory sounds are, however, very tell-tale. They consist of an exaggeration of the normal sounds merely, and for this reason require unusual care in noting them, in order that their full lesson may be learned. They are none the less fraught with meaning because they are difficult of detection. In the left infra-clavicular region the inspiratory murmur is feeble and jerky. The expiratory sound is prolonged. The sound, too, has lost to some degree the vesicular character and is slightly bronchial. On the right side the respiratory murmur is puerile but perfectly regular. Here then we have a consensus of signs—diminished motion, slight dullness, the irregular and prolonged murmur, and the bronchial respiration—which point to increased density at the apex of the left lung. Now, what is the cause of this density. It may reside in pneumonia; it may be pleuritic effusion; and again it may be a tubercular deposit. The length of time which the cough has existed and the absence of the pathognomonic signs, excludes pneumonia, and the flatness in the region under observation would of itself exclude pleuritic effusion. We are safe in assuming the presence of incipient phthisis, and shall prescribe accordingly.

Unfortunately we have no specific treatment for the condition which we find in this case. We must, therefore, fall back on general principles. So constantly does an elevated temperature attend the deposit of tubercle that we believe that it bears the relation of cause to the local effect. Could we succeed in preventing fever we should, probably, succeed in preventing further change in the lung tissue. We shall order this patient an antipyretic dose (gr. x) of quinine, every alternate day. An essential precaution in this antipyretic treatment, is to keep the patient quiet. He should keep his bed during the action of the quinine, and for this reason we shall order the quinine to be given at bedtime. For its anodyne properties, as well as for its action on the organic change which has commenced in the lung, we prescribe the following:

℞ Ammon. muriatis, ʒ ss.
Morph. sulphatis, gr. iij.
Pulv. ext. glycyrrhizæ, ʒ ss.
Syr. prunus Virgin., ad ℥ jv.

M. Sig. A teaspoonful in water every three hours.

A counter-irritant, in the shape of tincture of iodine will be applied every night and morning, until the condition of the surface prevents its further application.

EMERGENCY HOSPITAL CLINIC.

BY HAL C. WYMAN, M. D., DETROIT, MICH.*

CASE I.—AMPUTATION OF BREAST.

MRS. G——, aged 19 years, residence Metamora, Ohio, has been married two years, no children, began to notice a tumor in left breast about two years ago. Thought it was caused by a felon she had upon her thumb, as she noticed it about the same time. It has pained her some. She has had a variety of treatment. Last spring she went to the University clinic. The surgeon told her he thought she could be cured with electricity. She had four weeks of treatment, which she thought for a time benefited her, as the tumor diminished in size. Soon after returning home, it again began to pain her and to grow again. She came here to have the tumor removed, fearing that she had already trifled away valuable time.

Now, when we examine the breast by palpation we feel a firm, hard tumor, which is slightly less movable than tumors of the breast usually are. The adherence to surrounding

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parts suggests sarcoma. Its relation to the milk-ducts, as indicated by the condition of the nipple, indicates epithelioma. The lymphatics under the arm are tender and we can feel several distinct kernels under the axillary border of the pectoral muscles.

It is very unusual to find cancer in a person of this woman's age, and no doubt some of the eminent men she has consulted have thought her tumor was in no sense malignant. But the history (her mother had cancer), the retracted nipple, the singular character of the tumor, the invasion of the lymphatics, combine to present a clinical picture in which I think the future of the patient is very seriously threatened. It may not be malignant, and it may. I think it will be better for the patient to discuss that matter after the entire affected mamma and the diseased lymphatics have been removed by operation. Some one might ask why not remove all doubt before making so serious an operation on so young a patient, by examining a part of the tumor with the microscope. See whether the cells of sarcoma or carcinoma or epithelioma are there. You remember how McKENZIE pulled pieces of flesh from the throat of the German Emperor and had the eminent VIRCHOW examine them with his microscope. VIRCHOW is probably the ablest microscopist, so far as tumors are concerned, in the world. He declared the pieces given him by McKENZIE to be not cancerous. But, now, months after, when the Emperor is dead —and dead from cancer—he claims the pieces McKENZIE gavé him must have been from some other part of the throat. Why did not his eminent ability as a microscopist display itself and say what those pieces were. If they were not fragments of tumor they must have been fragments of muscle or mucous membrane, or some of the cervical tissue of the laryngeal reion. Through it all I think we can see that the famed value of the microscope as an aid to the surgeon is a little far-fetched. If VIRCHOW could not say what he had examined with his microscope, how can we expect the average practitioner of the wild and woolly West to tell with the microscope whether this woman has a malignant or benign tumor of the breast.

Observe that I commence my incision in the axillary region and carrying it along the axillary border of the pectoralis major muscle cross ing the breast obliquely. The internal end of the cut is much lower than the external end which rests in the axilla. The second incision cuts around the mammary areola and includes a large eliptical portion of integument. Flaps are dissected up and the tumor and mammary gland are exposed and removed. The lymphatics running from the breast to the axilla are enlarged and we carefully dissect them out. Note that some of the lymph-vessels are large as slate pencils and that degenerated and enlarged glands are scattered along on them. Al- of these we remove. The wound is now sponged with very hot water that has just been sterilized by boiling. Any bleeding arteries are ligated with silk that has just come out of boiling water. The sutures for closing the wound are of linen—plain bleached linen thread No. 25. It has just been boiled and waxed with wax that has been sterilized by boiling. The sutures are introduced half an inch apart.

Any bleeding caused by the needle and in carrying the sutures, is controlled by douching with hot water. A drainage-tube of sterilized rubber is laid in the bottom of the wound to conduct away the fluids which are thrown out in the process of repair. We will remove it in a few days after it has performed its function and the wound has begun to unite. What about the prognosis in this case you ask me, to which I answer, good, so far as the operation is concerned. We have not exposed our patient to great loss of blood or shock and we can reasonably expect a prompt and vigorous recovery. Whether the disease returns or not time alone can tell.

CASE II.—FRACTURE OF THE SCAPULA BELOW THE SPINE.

This man whom you see bedaubed with sand and filth from the street, has just been brought to the hospital by the ambulance. You can see and smell the evidences of intoxication. He is drunk, but the ambulance surgeon tells us he is also hurt about the shoulder.

The man can't tell how he was hurt. Looking him over, we find great swelling and discoloration about the left shoulder blade. Manipulating the part we find crepitus across the scapula below the spine. Setting the patient up we see the shoulder droops and we feel crepitus when the arm is lifted or the shoulder moved. We examine the shoulder and the clavicle to be sure there is no dislocation of the former or fracture of the latter. So rare are fractures of the scapula and so unusual is this one, that we are inclined to dispute the evidence until we find every organ sound that could produce the symptoms. We can understand how a fracture across the scapula below the spine can produce the drooping of the shoulder which is present in this case, by letting the upper fragment ride over the lower one, but it is difficult to understand how force could be applied to produce the results we have to deal with.

One who saw the accident says the man fell from the wagon on the street and on striking the pavement rolled over so that the hind wheel struck him on the back and slid him along on the pavement for a distance of ten feet. He thinks the wheel struck beneath the lower angle of the scapula and was held

there while the man was shoved along until the scapula broke in two and let the wheel pass on. That seems a very probable explanation of the accident. The man's clothing and the abrasions on his face indicate that he was pushed or dragged some distance.

The treatment in this case will consist first of a sling over the neck in which the arm can rest while the shoulder is held in proper position. Then a pad made of dampened pasteboard padded with cotton, is applied over the seat of fracture and fastened with a roller around the chest. The arm is held by the side so that there is little danger of the lower fragments of the scapula being displaced by the action of the latissimus dorsi muscle. I do not now recall to mind any author I have read who describes simple fractures of the scapula running across the body of the bone immediately below the spine. I can see no way such a fracture could occur except by some force getting beneath and behind the inferior angle of the scapula and crowding the bone out from the chest until it breaks across.

CASE III.—DISLOCATION OF THE SHOULDER—GREAT DISCOLORATION OF THE SKIN—ECCHYMOSIS.

This man, gentlemen, is 46 years of age. The ambulance brought him in last night. You see in his nervous manner that he is weak from the effects of a debauch. The exhalations from his lungs and skin are still freighted with the odor of wine. He says his shoulder pains. Look at it as his shirt is removed. See the discoloration of the skin over the left shoulder and arm to the elbow. On the inner aspect of the arm there is great ecchymosis. It looks as if some one had attempted reduction by putting his heel in the axilla—the method of SIR ASTLEY COOPER. The shoulder is dislocated, you see at a glance, notwithstanding the swelling. Nothing but that very rare fracture of the neck of the scapula could cause the flattening of the shoulder which is present in this case, and allow the straight edge or rule which I apply to the outer side of the arm from the condyle upward to touch the acromion process. The evidence of dislocation downwards is unmistakable. Some one, from the appearances mentioned, has attempted reduction and failed. You will observe how the patient resists any attempt to manipulate the shoulder. We will have to give him an anæsthetic before attempting reduction. While he is going under the influence of chloroform we will search for other injuries.

His nose is flattened to one side, indicating fracture of nasal bone and cartilages. The clots in the nasal fissure show that he has had severe hemorrhage from this region. One side of his face is bruised and blackened. His injuries have probably resulted from a fall down a stairway. We find the point of one elbow abraded, his knees and one hip show the effects of a rough and rapid slide, probably on a stairway. Now that he is fully relaxed by the chloroform, I find the head of his humerus in the axillary space behind the coracoid process. I extend the arm at right angles to the body, place my foot in the axilla and pull. While I am pulling the joint surface apart, I swing the arm down by the patient's side, using my foot as a fulcrum, and you hear the loud snap as the head of the humerus slids into the glenoid cavity of the scapula. I can now bring the hand to the opposite shoulder, make him pull his nose and perform various movements which cannot be executed when the shoulder is dislocated. Again applying the straight-edge to the arm I find that it clears the acromion process, and I am convinced the dislocation is reduced.

PELVIC PERITONITIS.*

BY JAMES OLIVER, M. D., F. R. S. EDIN.†

Pelvic peritonitis is an acute or chronic disease, consisting in inflammation affecting, it may be, the whole, but more usually some part only of that serous membrane which, located within the cavity of the pelvis, enters not only into the formation of its walls and floor, but covers, more or less completely, the organs contained therein. The appelation is one, therefore, which includes peri-metritis, peri-oöphoritis, peri-salpingitis, and peri-proctitis. Although originating locally in the pelvis the inflammatory disturbance may, nevertheless, through a direct continuity of tissue, spread to and affect the whole peritoneal sac, constituting then what is called general peritonitis.

Inflammation of the pelvic peritoneum may occur at any period of life. It may exist before the establishment of menstruation or be developed after the cessation of the functional activity of the sexual organs. More commonly, however, it is engendered during the child-bearing epoch, the organs of generation being then more vulnerable. In the marital state the serous lining of the pelvis is especially prone to become the seat of inflammatory change, because of an increased liability to injury and disturbance of the sexual organs, consequent upon parturition and abortion. Ignorantly and unsuspiciously the woman often runs the risk of specific infection—a potent but occult influence, in many cases constantly at work, and tending to induce the disorder in question.

The inflammatory process may result in a thickening of the peritoneum and adhesion of

*Reprint from British Medical Journal.

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opposing surfaces, the neighboring organs, contained in the pelvis, being thereby firmly glued together. Very commonly, however, the material which exudes from the vessels, and subsequently coagulates, produces a distinct swelling, the consistence of which varies greatly. These phlegmons are often difficult to differentiate from those resulting from inflammatory exudation into the cellular tissue itself. By a process of fatty degeneration and liquefaction the plastic exudation occurring in pelvic peritonitis may eventually become absorbed. Adhesions, however, generally ensue, the existence of which may be indicated by a more or less marked deviation of the uterus, the organ, that is, being more or less closely applied to one or other wall of the pelvis. Effusion of serum may take place, and this, when confined and large in amount, or rather, when capable of detection, constitutes what is termed encysted serous peritonitis. The transition from that of a serous to a purulent effusion is a gradual one. In the latter case the pus corpuscles are merely far more abundant than in the former. When effusion of serum has occurred the liquid portion may at length completely disappear by a process of gradual absorption. At first absorption takes place, as a rule, somewhat rapidly; as concentration advances, however, it is much more slowly effected. After absorption the disordered peritoneal surfaces come in contact and adhere. When the exudation is purulent this, too, may eventually become absorbed—the serous portion directly, the fibrin and pus after undergoing a fatty metamorphosis. This, however, comparatively speaking, rarely happens.

In pelvic peritonitis small suppurations frequently take place, and these, as distinct abscess formations, cannot be detected by the most careful examination. The probable existence of such in any given case is only surmised when small quantities of pus are detected with the rectal evacuations. Fortunately these ruptures occur most commonly into the gut; they may, however, as I have occasionally witnessed, rupture into the peritoneal sac, and so cause death. Regarding the mode of formation of these small suppurations, I have a word to say. They appear to me to result from the generation of pus corpuscles in the tissue of the peritoneum itself, and the perforation results from the deep penetration of these cells.

As to the etiology of pelvic peritonitis I have but little definite information to impart. The disease is especially rife in women, and may be considered peculiar to the female habit of body. This, to my mind, apart altogether from the risks incidental to child-bearing, or those dependent to a certain extent upon anatomical construction and direct structural continuity, points to a marked disposition on the part of this serous membrane in the female to inflammatory change.

Pelvic peritonitis is frequently idiopathic, and in many cases the exciting causes are not to be explained. The disease often develops in persons already debilitated or in association with some other disorder; this, however, proves no dependence, and does not justify the conclusion that the disease is secondary. Under such circumstances it ought to be viewed rather as a complication. Peritonitis accompanying puerperal fever and other infectious disorders may, however, be considered secondary. Injury is an exciting cause, and this need not be severe, as some persons seem especially prone to this inflammatory disease. I have seen fatal peritonitis follow upon the most trifling interference with the uterus, and this accident, when it occurs, is a most unfortunate one, apt as it is to engender infection. A most careful and thorough examination of the pelvic organs should be effected prior to undertaking any surgical or other interference with the uterus. Even in the hands of the most skilled gynæcologist this task is not always an easy one, as it is often most difficult to detect slight adhesions.

Pelvic peritonitis may be induced by a direct extension of inflammatory disturbance through contiguity of tissue, as happens frequently in salpingitis, especially when this is the result of gonorrhœal infection.

Inflammation of the serous lining of the pelvis may also be caused by neoplasm approaching the peritoneal surface, as happens frequently when the growth is malignant, and much more rarely when it is benign.

In many cases this disorder appears to result from exposure to cold, from the indiscriminate use of medicated injections, and the adoption of other ill-advised methods of protection against impregnation. It may also be caused by the rupture into the peritoneum of a cyst (containing virulent fluid), or abscess of the ovary or any other structure. Such abscesses may be simple or tubercular. It sometimes results from the discharge of any irritant fluid into the peritoneal sac, either through an abnormal or, it may be, the natural opening of the Fallopian tube, hence the risk of injecting simple or medicated fluids into the cavity of the uterus.

Pelvic peritonitis, it is alleged, is more common in primiparæ than multiparæ, this however is simply due to the fact that being in many cases connected with parturition and abortion, those who are susceptible to this inflammatory disturbance evince it when those causes which tend to induce this disorder are for the first time called into existence.

If the disease be due to the rupture of any sac containing pus, or to the escape of any

irritant fluid into the sac of the peritoneum the patient may never rally, but die within a few hours, it may be, in a state of collapse. In a few rare cases it happens that adhesions already formed may prevent the extensive or free escape of such fluids, and recovery more or less complete is thereby rendered possible.

In the more acute cases the disease may be ushered in by a distinct "chill" or rigor, a feeling of intense indisposition being thereafter experienced. In the majority of cases there is no chill, and the patient is wholly unable to fix a time when the inflammatory process may have originated. Usually the onset is insidious. Often I have seen patients the victims of pelvic peritonitis who were wholly ignorant of the possible existence of anything like a grave disorder. The disease may, as in a patient recently under my care, develop in the peritoneum covering the rectum, without giving rise to any symptom other than a feeling of discomfort and pressure in the "back passage." In this case the uterus was closely applied through the medium of a small amount of plastic exudation to the upper part of the rectum. In many other cases which have come under my care, an insidious character of the disorder has been noteworthy and astonishing. In the majority of cases pain is the symptom most frequently complained of. This is as a rule referred (although not constantly) to the side which is the seat of inflammatory change. I have occasionally, as in the case of the pleura, noted its reference to the opposite, and as far as examination goes healthy, side. Sometimes the pains are ill-defined, and are felt more or less extensively in the lower abdomen. They may recur in paroxysms, and continuing severe for two or even five hours, leave the patient afterwards so very tender that she is wholly unable to bear even the slightest pressure on the lower abdomen. Such paroxysmal pains may, like those complained of at the onset of the disease, be accompanied with nausea and vomiting. The pains vary; sometimes they are slight, sometimes severe, and occasionally, especially when the peritoneum covering the uterus is involved, they are likened to those of labor.

Menorrhagia is a most common association of pelvic peritonitis, and in many cases it is this alone which leads the patient to seek advice. There is as a rule no pain so long as the hæmorrhagic discharge is free, a fact explicable on the ground of depletion. Pain may, however, develop and continue whilst the patient is losing blood, the loss apparently being insufficient to relieve the state of consequent increased vascular tension. This is especially apt to be the case if the inflammatory attack develop during menstruation, and there results no augmentation in the amount of discharge.

Pelvic peritonitis may develop in a woman who has recently miscarried or been delivered of a full time child. Under such circumstances the symptoms are especially prone to be insidious. Slight pains may have been experienced since the abortion or confinement, or a hæmorrhagic discharge more profuse than usual may appear without the patient experiencing any other discomfort. The discharge, once established, continues, as a rule, free, and more or less constant for weeks or even months. Occasionally clots are expelled. In such cases no pain whatever may be complained of till the hæmorrhagic discharge ceases. The pain may be of the "bearing down character." This bearing down pain differs from that associated with initial prolapse in that it continues when the patient is recumbent. This symptom in pelvic peritonitis is the result of structural change, although it may sometimes be associated with structural enfeeblement as well. In prolapse it is a direct result of gravitation, and ceases to be experienced when the influence of this factor is withdrawn.

Pain may be referred to the hip, the thigh, or vagina, according to the distribution of those nerves implicated, whether directly or in a reflex manner. As a result of pressure, I have occasionally noted a distension of the superficial veins of the thigh.

Bladder Symptoms.—If the disorder be free from complication, there is, as a rule, no frequent desire to pass water. In the early days pain during micturition is seldom complained of. When, however, adhesions have formed, pain is experienced, either when the bladder is over-distended or over-contracted, and the pain will continue so long as either of these states of this viscus exists. If the patient, therefore, does not answer immediately the call to pass urine, pain more or less severe is complained of. Under such circumstances pain is specially noted in the early morning after sleep. In the majority of cases pain is experienced for a greater or less length of time after the bladder rids itself of its contents.

Rectal Symptoms.—Plastic deposits may insidiously encircle the sigmoid and upper part of the rectum, and induce symptoms of pressure, with or without pains of a shooting character referred to the "back passage." The gut may even, in some rare cases, become completely constricted, and serious symptoms in consequence ensue.

In the majority of cases of pelvic peritonitis the temperature of the body is but slightly elevated, except when the inflammation is severe and extensive, or when the effusion is from the first purulent or has become so. In chronic cases the pain is, as a rule, aggravated just before, but is relieved by the appearance of the recurring hæmorrhagic discharge. Suppuration and abscess formation is not at all an uncommon result of pelvic peritonitis. Puru-

lent exudation sometimes takes place (commonly in association with metrorrhagia and little pain), and usually ends fatally when the inflammation is severe and extensive. As a rule, adhesions are formed before the granulation tissue generates pus, and the pus so confined and accumulating produces one variety of pelvic abscess. The peritoneum itself, as well as the inflammatory adhesions confining the purulent exudation, become apparently thickened, and thereby the risk of extravasation into the general sac of the peritoneum is minimized. Fortunately, rupture takes place rather toward the bowel, vagina, or some other pelvic structure, or occasionally towards the abdominal wall. The most frequent and by far the most advantageous location for discharge of the contents of a pelvic abscess is at some part of the bowel. I have seen pelvic abscesses in which the walls of the sac have become so thickened, and the fluid therein contained caused so much tension, that the differential diagnosis from that of uterine fibroid was rendered most difficult.

Correspondence.

THE RELATIONS OF THE PHYSICIAN AND DRUGGIST—TWO SIDES TO THIS QUESTION.

In the MEDICAL AGE of 10th Nov., appear two letters from physicians, and it seems, in the first instance, that they have started off in a very belligerent attitude. The letters are headed "Doctors *versus* Druggists." It should surely be remembered that a doctor and a druggist should be friends, not enemies, and the word "versus" should surely not be used between friends.

It seems from the contents of both these letters that the doctors have both been treated, in a general way, rather unfairly by the druggists of their respective towns, but such sweeping measures as they suggest would be manifestly unfair for the whole of the profession. The trouble seems to lie in their having had prescriptions refilled without reference to the prescriber, and there is certainly cause for complaint in this direction.

The sale of patent medicines is also a sore spot, but *what is a druggist to do?* The proprietor of a nostrum goes to the expense of addressing a circular to the residents of a certain town, and creates a demand for his preparation. When a bottle of this compound is applied for to the druggist, should he enter into an argument on the patent-medicine evil, and lecture his would-be customer on the sin of not applying to a physician for a prescription for the remedy of his real or fancied ills? As a business man, he takes the business standpoint, and fills the demand which has been created, possibly by no action whatever on his part.

As regards the refilling of prescriptions, the trouble does not always arise by reason of the druggist's "greed of gain." It is the fault of the physician, in most instances, in not having legibly printed on his prescription blanks the legend that the formula is not to be refilled, and a copy is not to be supplied to the patient. A pharmacist worthy the name will invariably respect the wishes of the physician, and decline to take action without his authority.

Now let us look on the other side. How often is the druggist blamed for mistakes made by the physician? How often is the medical man's reputation left in the hands of the druggist? What does not the physician owe to the druggist for the careful filling of his prescriptions from first-class ingredients, when cheap, and consequently inferior goods might be substituted without detection? How often is a druggist ready to tear his hair from inability to read the terrible pen-tracks, supposed to represent a clever doctor's handwriting? What trouble is not a druggist put to by the want of knowledge of the average physician of the laws of compatibility? Twenty times a day a druggist without his knowledge in this direction, might poison off the patients of the physician, and who but the latter could be held responsible?

To sum up, it seems that to dwell together in unity is by far the better way. If an old woman does want a plaster for her old man's lame back, and applies to a druggist for it without a physician's prescription, is it not better for all parties than for the customer to make it herself, over the kitchen fire—as she would most assuredly not go to a doctor for permission to purchase it. Let the druggist look after the interest of the doctor, and the doctor trust the druggist a little more, and these bickerings between two most estimable professions would soon cease.

M.

THE PREVENTION OF CONCEPTION.

I have been deeply interested in recent communications in the medical journals on the question of the prevention of the legitimate results of sexual congress. There seems to be a growing sentiment that it is proper, and not dangerous to the well-being of either the male or female, that the discharged spermatozoa should not be allowed to reach the ovum, and hence medical men and the makers of instruments are importuned, and not always in vain, to suggest methods and to devise apparatuses to that end. I am one of those whose veneration for nature is limited only by their ignorance of her mysterious workings, and, consequently, cannot subscribe to the sentiment re-

ferred to. Personally, when I took to me as wife the woman whom I loved, and for whom my love has not abated, I married her with a full knowledge of the probable consequences. Among these "consequences" are upwards of half a dozen healthy children, and I hope the end is not yet. Had I had in mind only the gratification of a perverted brute instinct, I should not have incurred the expense incident to house-keeping. I could have been gratified at a much less cost.

Entertaining the views which I hold, and having given evidence of my endorsement of them, I cannot read with patience the suggestions of vileness, and the recommendations of the introductions of the devices of the brothel, which come to us through the columns of reputable medical journals. If men and women do not want children let them avoid the cause, and if they will persist in the indulgence of pure brute passion let them abide the legitimate results. This is the only self-respecting stand which we as medical men can take on this question, and shame, say I, on the medical journals which admit to their columns the ill-disguised lascivious communications to which I have referred. The function of a medical journal is something higher and nobler than this.

ROBERT T. JOHNS, M. D.

MATERNAL IMPRESSIONS.

Whether real or unreal, is an idea that does not down at any one man's bidding. It is as old as early Bible history, and has been the buffet of many learned writers and the belief of many intelligent people. Still, the writer of this paper, whose name, by the way, is THOMAS, could never bring his mind to believe that the statements of the theory were based upon any *known* facts.

This idea had such possession of him even in his student days that at the time of his graduation, in the autumn of 1850, he took for the subject of his thesis the "Influence of Imagination Upon the Fœtus in Utero," and in search for material to sustain the negative he ransacked all the libraries he could reach and examined every volume he could find bearing upon the subject.

The Bible history, he maintained, had reference to a special dispensation of Providence that was only effective at the time of conception or impregnation. In his search he found that this sometimes popular idea had been made to cover many a sin; that where a mulatto child was born to white parents, the husband, upbraiding his wife for her infidelity, was quieted at once by asking if he did not remember how frightened she was when Sambo held the carriage door for her to step out not long before. The white woman, also, who gave birth to a mongrel Indian, put her husband's mind to rest when she told how "big Tom" had chased her up in the field some time before her child was born; and when the young tigers appeared in the bush with with little puncheons on their tails, he read in the "Brother Jonathan" how some men who, when they had their mother (the tigress) under a big puncheon several months before, had fastened her tail through the bung-hole to hinder her from catching them before they could escape to their homes.

Upon receiving his medical diploma, this young doctor watched with the utmost care every confinement case that came to his hands from the year 1850 to the present time, and he has had thousands of them, in all grades of life, but never has he found a single instance where the mother could explain the cause of the deformity until she had studied the case a while or perhaps been prompted by some of her very kind neighbors. With his patients it has always been an after-thought, and not in a single instance has the expected been known to happen.

The latest absurdity of this kind that he has seen in print, is reported by a DR. LOWMAN, of South Carolina, who asserts that a colored woman's fright gave to her fœtus the body of a buzzard and no head, because it was a headless pig upon which the buzzard was feeding at the time the mother become frightened at it. In his report DR. LOWMAN presents the names of two other medical men who saw the little monstrosity and are prepared to corroborate his statements, led thereto probably by the maternal representation. Now, to the writer, this whole story seems absurd on the very face of it, and is evidently a freak of their own imagination after the mother had told them of her fright, etc., and should be classed with the story of the child that was distinctly heard to cry out at various times during the last month of its inter-uterine life.

T. B. NICHOLS, M. D.

PLATTSBURGH, N. Y.

DR. LOVE, of the Weekly Medical Review, has discovered that, no matter how much of a scientist a man be, he is not properly qualified to practice pædiatrics until he himself graduates as a parent. This is a qualification which many of our profession long have sought, and mourn because they find it not. It is, however, a very great hardship that such trivial inherent defects should be a bar to their success in the treatment of other people's children. DR. LOVE makes no exception either, even in cases in which the fault lies in the wife.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., DEC. 10, 1888.

Editorial.

VASO-RENAL CHANGES AS A CAUSE OF STILL-BIRTHS.

Dystocia, ergot and syphilis are generally regarded as the principal causes of still-births. Dr. E. P. Christian, of Wyandotte, Michigan, however, points out in a characteristically able paper in the Annals of Gynecology, that the latter two of these causes are probably not infrequently held responsible without sufficient reason, and that, indeed, vaso-renal changes are a cause which is very apt to be overlooked. The cause of these vaso-renal changes, leading in some cases to albuminuria and in others to disordered renal functions, in pregnancy, is a subject as yet in a great degree of obscurity, although Dr. Fothergill has shown how these changes culminating in the various manifestations of gout, Bright's disease, etc., have their beginnings in deranged hepatic function, and this from digestive derangements. Dr. Christian, therefore, pertinently asks, may we not find, then, in the increased demands made upon the digestive organs of the mother in gestation, for the supply of the means of development and growth of the fœtus, one probable cause of these changes? He refers to a paper on Lithiasis in Pregnancy, read by Dr. J. E. Kelley before the 38th annual meeting of the American Medical Association, and quotes therefrom as follows:

"If we now turn our attention to the phenomena of pregnancy, we cannot fail to observe a remarkable coincidence between the diseases as well as the pathology of that condition and lithiasis. All these features to which I have alluded when reviewing lithiasis, are frequently seen in pregnancy. The structural changes which are present in the former are of common occurrence, and the physiological conditions of gestation are favorable to its development. In the etiology of the two classes of diseases the parallel is sustained, as in both we have the same hæmic influences, the same irritable or explosive state of the nervous system, and the same renal and digestive disturbances." And again:—

"The condition of the maternal blood in gestation is in keeping with the physiological relation which exists between the mother and the development of the fœtus. The cell-changes of the composite animal are increased proportionally with the growth of the fœtus and the containing uterus. The fœtal organs, with the exception of the heart and liver, are practically inert, and the double duty is imposed on the corresponding maternal organs. The medium through which these additional functions are performed is the maternal blood, and consequently the quantity of the nutritive and the excretory substances conveyed are necessarily increased, and, owing to the greater constructive and metabolic energy exerted during the process of development, increased most probably more than in the ratio of the utero-fœtal mass to the mother. The chief nutritive and excretory matters circulating in the blood are nitrogenous and inorganic, and consequently are conducive to the development of lithiasis as well as puerperal septicæmia, eclampsia, peritonitis, and thrombosis." And again:—

"The hepatic disturbances are additionally interesting, owing to the weight of evidence which has been adduced to convict the liver of being the chief offender in the production of lithiasis. There is undoubtedly more than a causal (casual?) relation between pregnancy and hepatic disturbance, as is evidenced by the frequency of pigmentation and jaundice, acute yellow atrophy of the liver, a disease which is associated with gestation with significant frequency."

In such statements and suggestions we have the explanation of many of the phenomena presenting in gestations and parturitions resulting in still-births, and the evidence that there is an causal connection between vaso-renal changes in the mother and the consecutive accident of a still-born fœtus.

Probably the most frequent of still-births from this cause are consecutive to albuminuria in the mother; and Dr. Christian presents a history and analysis of the cases of puerperal eclampsia occurring in his practice, sixteen in all, to support this assumption.

The conclusions which Dr. Christian draws are suggestive:

(1.) That only a small portion of the subjects of albuminuria during pregnancy became the subjects of eclampsia.

(2.) That eclampsia might appear in those in whose urine albumen has not been detected, and who have presented none of the general symptoms leading to a suspicion of its existence, which cases are probably of a reflex character, and that, therefore, some other element or condition is necessary for the production of convulsions besides the condition of albuminuria; and which, until we are better informed

as to what it consists in, we may call an irritable or explosive condition of the nervous system.

(3.) That the subjects of albuminuria are very liable to premature labors, and also to still-births, and that in those cases the fœtus may present, in commencing or advanced decomposition, evidences of a post-mortem retention in utero for some time; and this antepartum death of fœtus probably depends upon a state of toxæmia in the mother, but even, in some cases, upon secondary changes in the placenta and interference with the fœtal circulation, and that the parturient may incur additional sufferings and danger from the death and decomposition of the fœtus.

(4.) That the apoplectiform variety may occur in either an albuminuric or non-albuminuric parturient, the typical cause being a stout, healthy-looking, full-blooded woman, in whom, during labor, especially in the second stage, with the powerful muscular efforts of the patient, the face becomes purple, and the veins of the head and neck turgid, and distended to degree apparently ready to burst, and in whom it is apparent that the brain is equally turgid with blood, and quite conceivable that these distended vessels may in some spot have yielded, and occasioned more or less of an effusion; or perhaps only a distention to rupture of some of the fibres of the vessel, preventing a ready contraction, and in whom, therefore, more or less of a congestive state may remain for some time. In my experience these cases have usually had the convulsions after completion of the labor, and perhaps we may find in this explanation the reason also for this delayed outbreak. These are the cases in which free venesection has an almost uniformly speedy and favorable effect.

On the other hand, in the typical-appearing albuminuric, with pale and pasty complexion, with anasarcous ankles and tumefied tissues under the eyes, etc., we have none of these appearances of active cerebral congestion. And yet, as MARSHALL HALL has shown us how similar may be the symptoms arising from cerebral congestion, and from excessive losses of blood, is it not possible to find in both these classes, the florid and robust-looking, and the anæmic and unhealthy-looking, so very different conditions leading by different ways to similar final results? In the one, the pressure of an active congestion or effusion of healthy, red blood; in the other, a similar pressure from an effusion of its watery part, as exhibited in the cellular tissue of the legs, the face, and even in the abdominal cavity.

COMPENSATION FOR MEDICAL SERVICES.

The question of remuneration for services rendered, is a living one with the practitioners of the healing art. Originally, we are told, it was one of minor importance, and those who healed men of their infirmities were abundantly rewarded in the satisfaction which fills the soul of him who does a good deed. And there occasionally, even at this late day in the world's history, appears one who holds it to be unprofessional and contrary to the genius of our noble calling, to pursue the practice of medicine as a means of making money. It converts the n. c. aforesaid into a trade! Fortunately, the race of these, worse than doctrinaires, is growing beautifully less, and the list of those who feel imbued with the burning desire to "maintain the dignity of the profession," is not being replenished by recruits enough to supply the places of those of their kind who are responding to the final calls of nature. Of all the bores whom we are obliged, through courtesy, to endure, the greatest is the man whose mission it is to "maintain the dignity of the profession." As a rule he is a hypocritical sniveller who finds in his reviling of the men who practice medicine, as he says, as a "trade," a certain relief from the disappointment which has attended his efforts to make the "trade" profitable. He is more intolerable even than the canting clergyman who obtrudes on you with questions as to the status of your soul, and who affects an entire disregard for temporal things. In spite of all the latter's protestations he is never known to turn a deaf ear to the call to a higher salary and better social surroundings.

The medical man, as such, owes society nothing, and he is entitled to and should insist on being paid in full, compensation for his services. There are certain claims in the interests of charity, which society has on its members, but these are not more binding on the practitioner of medicine than they are on the practitioner of law, the seller of drugs, the dealer in shoes, or any other citizen. We owe it as men to contribute our share, according to our means, to the relief of suffering and distress, but the obligation is no more binding on us than on others. Those who have succeeded in establishing practices from which they derive competencies, are therefore not entitled to credit for the large amount of "charity practice" which they do. The "good doctor" who "never sends in a bill," is the curse of our profession. His "charity" like all other charities which are unworthily bestowed, is an evil rather than a good. Like them it tends to increase the breed of paupers, with the difference that the object of this misplaced medical charity is classed among the "respectable" portion of the community. It is this medical pauperism which is ruining the practice of medicine. A large class of comparatively well-to-do, but execution-proof, people have been so educated through the "charity"

of the "good doctor" that they treat the bill for services by the young physician whom stern necessity compels to make his calling a "trade," in the light of a joke.

The demoralizing effects of misdirected charity of the nature indicated and the lack of proper business methods (the methods of "trade") are widespread and far-reaching. The effect is both on society and on the practitioners of medicine, and it can be counteracted only by systematic action on the part of the profession. It is time (our material interests demand it) that our medical societies should recognize the business interests of our calling. It is, of course, profitable for us to meet for the discussion of the means best calculated to secure the best results to our patients, and this feature of medical societies need not be neglected. But our patients will not suffer if we discuss also, and adopt, the best means for securing from those to whom we minister, the hire of which the laborers in our field are quite as worthy as are those who work in other fields. Doctors wives require to be clothed and fed, and their children require to be clothed, fed and educated, even as do the wives and children of other men, and the wherewithal for these things must be derived from our clientele. The butcher, the grocer, the dry-goods merchant, the educator, such is our experience, are inexorable in their demands for their pay, and the fact that the profession renders full one-half of its services gratuitously, makes no difference in the size of their bills.

Concerted action on the part of the profession could do much towards remedying the evils from which we suffer. All of the other callings among men, except those of medicine and theology, have their associations for the protection of their material interests. The theological gentlemen are not sorely in need of such, but the practitioners of medicine really are. Let us renounce, in a very practical manner, the myth that the practice of medicine is a profession without its important "trade" features.

THE LAST WORD ON EMPEROR FREDERICK'S CANCER.

The case of the late Emperor Frederick is one of unparalleled interest for several reasons. Other men have been similarly afflicted, it is true, and from a scientific standpoint a cancer in an Emperor's throat differs in no respect from the same disease as it occurs in an ordinary mortal of the human species. The prominence of the patient, however, and the row which developed into such malignancy among his medical attendants, combined to bring out facts in connection with malignant growths, particularly in the larynx, with which the general practitioner, and, probably, also specialists, were not previously familiar. The ethical and the scientific features of the case have been freely discussed (the former *ad nauseam*), and we do not propose to do any threshing on old straw. A letter, however, from the Empress, the widow of Frederick, has been published in the Pall Mall Gazette, and we believe it will have sufficient interest for our readers to warrant our reproduction of it. While its object is to defend SIR MORELL MACKENZIE against the brutal attacks made on him by his German associates in the case, it is of scientific interest from its statement of Sir Morell's diagnosis and prognosis on first being consulted:

"I took care," says the Empress, "to tell all eminent German medical men with whom I came casually in contact that you had said to me the first time I saw you, that though what you saw was innocent, yet you could not be sure until it was examined by VIRCHOW, and that *a malignant disease might be present somewhere out of sight*, though there was no proof of it, *the most unfavorable element of the case being my husband's age at the time.* You told me that benign growths and malignant growths were seldom found together, and that you thought the growth you could see on the vocal cord was a benign one. *You also said you could not hold out any security to me that a malignant growth might not appear some day.* You said that the operation proposed was running too great a risk, that it was exposing life, and that should it succeed, the condition of the patient after would be so terrible that his chances, if let alone, would be more favorable. I have since heard that different German medical men think this a reasonable and sensible view, and that, under the circumstances, we could have done nothing better. You also said, *I think*, if I remember rightly, that you would not have laryngotomy or laryngofissur performed on your own throat on the surmise or suspicion of a malignant affection of the larynx without very positive proof, and not even then, as the tendency of malignant disease was to reappear in other places when removed from one. Consequently, there would be a possibility of having gone through the operation, and yet losing one's life after all, by the reappearance of the disease. Furthermore, you said, I think, that you did not know whether the Crown Prince's constitution could withstand so serious a shock as that inflicted on the whole system by so important an operation. I should have repeated all this at the time much oftener had not the prevailing feeling been one of joy and gratitude at having escaped the horrible operation. *You can show this letter to whomsoever you please.*"

OBITUARY—DR. H. O. HITCHCOCK.

The daily papers bring to us the sad intelligence that DR. HOMER O. HITCHCOCK, of

Kalamazoo, Michigan, died at his home on the 8th inst. DR. HITCHCOCK had for many years been one of the most prominent figures in medical circles in this State, and the news of his death will be received with unmingled regret by the profession, to whose members his well-marked personality, his cordial demeanor and his broad scientific attainments especially endeared him. He was a man much above the average in all the requisities of manhood, and his taking off will leave a vacancy which will be felt.

DR. HITCHCOCK was born at Westminster, Vermont, January 28th, 1827. He took his degree of A. B. at Dartmouth in 1851 and in 1854, the degree of A. M. He was graduated from the College of Physicians and Surgeons of New York in 1855. In September, 1856, he removed to Kalamazoo, in this State, where he has since remained and where he established himself as a more than ordinarily successful practitioner, his many noble traits of character combining with his superior professional ability, to make him the ideal physician. He was a man of large and rugged physique and well qualified to undergo the hardships incident to practice in the Western part of this State thirty years ago. He was a ready writer and contributed numerous articles, chiefly on surgical and gynecological subjects, to periodical literature. He was President of the Michigan State Medical Society in 1872, and in 1874 was President of the State Board of Health, of which he was also for several years a member, and had much to do in determining the success which that Board has achieved, and which has made it prominent among the health organizations of this country.

DR. HITCHCOCK was twice married—in 1856 to Miss Wellman, of New Hampshire, and in 1875 to Miss Wiicox, of the same State.

A NATIONAL PATHO-BIOLOGICAL LABORATORY.

We have received a copy of a bill which is to be presented to Congress, for the encouragement of scientific research particularly in the direction of the nature and cause of contagious, infectious, and malarial diseases. The following are its distinctive features:

1. The bill divides the work into two distinct divisions, human and animal diseases.

2. It places it in charge of the Surgeon-General of the Marine Hospital Service, thus supplying him with the means of acquiring a body of competent workers, with whom he may become acquainted beforehand.

3. It leaves him the world to choose from for directors of the two institutes, while it limits the selection of assistants to this country, thus providing the way of Americans of ability to rise to chief positions.

4. It gives a chemist to each institute.

5. It opens the way to independent workers, and thus increases the number, while the country has the benefit of the results.

6. It opens the way for students, thus providing the means for boards of health and medical schools to obtain competent men, and stimulating research in all parts of the country.

7. It tends to make our national capital a center of learning and culture, which should be the ambition of every citizen.

Certainly a measure presenting the above features cannot fail of the support of the medical profession. Our government has done much too little in the way of fostering scientific research. The preëminence which Germany occupies in the world of science, is due to the encouragement and financial support which she systematically gives to the original investigator. The work contemplated in the bill referred to is, moreover, one the benefits of whose results will be entirely to the people. We are pleased to note that DR. FRANK S. BILLINGS, Director of the Patho-Biological Laboratory, of the State University, at Lincoln, Nebraska, has lent himself to the enactment of the bill, and any measure into which he interjects his personality has made a long stride towards success. We hope he will receive, as he should, the cordial support of the profession in his efforts.

THE USE OF PEPSIN IN THE LOCAL TREATMENT OF DIPHTHERIA AND MEMBRANOUS CROUP.

The field for the use of pepsin seems constantly extending with the improvements made in the quality of this agent, and it may now be employed with greater certainty as to results than ever before. The application of pepsin to digest away the membrane in diphtheria and membranous croup is not new, and is more or less commended and resorted to by physicians in the treatment of these diseases.

Naturally, however, its utility depends entirely upon its digestive activity, and on account of the many preparations of pepsin of feeble or no digestive power heretofore at the disposal of physicians the results obtained have been in some cases discouraging.

As to the value of pepsin, however, in these affections when of proper purity and strength there can be no question. We believe that the recent improvements in pepsin, securing greater purity, strength and permanence (we allude to the pepsin purum in lamellis of Parke, Davis & Co., which is the nearest approach that has yet been made to pure pepsin, and possesses more than twice the digestive power of any

previously introduced), will lead to its extensive use in diphtheria and membranous croup, maladies now attended with such grave results, even when treated by the most expert medical care

It is to be hoped, and it is certainly highly probable, that the further study of digestive ferments will lead to the production of a pepsin still more active.

If the false membrane could be easily digested, and there seems no reason why it might not be with a pepsin of high digestive power, we could expect to have fewer grave cases of interference with respiration, and of blood-poisoning from absorption of septic material.

We have been interested in reading in this connection an article on the use of pepsin in the treatment of croup and diphtheria, by DR. A. J. C. SAUNIER, published in the Western Medical Reporter, October, 1888, and which we reproduce on page 545 of our present issue.

Notes

On a recent visit to Detroit the ubiquitous reporter secured an interview with DR. WILLIAM A. HAMMOND, of New York, and elicited a number of interesting facts in connection with the doctor's stirring life. Among other things it was stated that his income averaged two hundred dollars a day, the year round, or $73,000 per annum, and that his son's income reaches half this sum. This success is a fitting result of long years of struggle, and DR. HAMMOND is to be congratulated thereon. He has since removed to Washington, D. C., where he has opened a private hospital for the care of the curable insane and the treatment of nervous diseases. On leaving Washington, after his dismissal from the Surgeon-Generalship of the Army, a quarter of a century ago, and being somewhat under a cloud, he declared that when he had fully vindicated himself and after he had been restored to his rank as an Army officer, he would return. The conditions which he then imposed have been fulfilled to the letter, and we hope he may live long to enjoy the fruits of his great skill and his remarkable perseverance. He is a living example for the emulation of the men of this generation.

The American Academy of Medicine held its twelfth annual meeting in New York, on the 13th and 14th ult. This is the society which is made up of the B. A.'s and the M. A.'s in the profession—none other need apply. We have scanned the proceedings in vain to discover anything of superlative value that was accomplished. The burden of the papers was the deplorably low standard of education which exists in our medical colleges. At the risk of being considered impertinent, we would suggest to this very distinguished body of excellently educated gentlemen, that the best proof of the value of the degrees of B. A. and M. A. which they can furnish, would be a superior lot of papers to those furnished by societies in which these degrees are not essential to membership. There was not one paper presented at their late meeting which arose above the level of the common-place, and some of them didn't even rise to that level.

Grace Hospital, the new homœopathic institution of this city, and the munificent gift of Messrs. JAMES MCMILLAN, JOHN S. NEWBERRY and AMOS CHAFFEE, to the adherents to the dogma of *similia similibus curantur*, was opened for patients on the 6th inst. It is an admirably equipped hospital—one of the finest, indeed, in the country. It cost upwards upwards of $100,000. Nearly all of the homœopathic practitioners of the city have been appointed on its visiting and consulting staffs. It runs a handsome ambulance in connection. Fortunately it has an ample financial backing, and its friends will unquestionably be frequently given opportunity to prove their fidelity in a substantial manner. There was no room for such an extensive institution of this nature in our midst, and we think this opinion will be corroborated by the fewness of the inmates.

In ten years, 1877 to 1887, inclusive, the medical colleges of this country turned out thirty-six thousand and ninety-seven doctors. This, at least, is the number according to DR. WOOD who has been looking the matter up. Of this number he estimates that a quarter, or nine thousand, are no good, and then asks, "Can any one estimate the amount of damage that nearly nine thousand improperly educated doctors can do in ten years?" And yet the population of the country keeps on increasing and the average duration of life lengthening. The worst college of to day is better than the best of even twenty-five years ago. But it seems to be the fashion to be pessimistic on this subject. Of course our medical schools are not as good as they should be (and they never will be that), but we don't believe we are going to the d—estruction as fast as some would try to make us believe.

We regret exceedingly to note that trouble of a serious nature has overtaken DR. E. HALSEY WOOD, of Hersey, Mich, a name familiar to the older readers of the AGE as that of one of its most entertaining, although slightly erratic contributors. DR. WOOD had a quarrel of many years' standing with his brother-in-law, whom he claimed was indebted to him for a large amount—some $10,000. During the feud the brother-in-law's barn was burned to the

ground and DR. WOOD has been found guilty of the incendiarism. He was sentenced last week, to sixteen years in the State's prison. We sincerely hope that extenuating circumstances may develop which will result in the abridgement of this severe sentence. The plea of insanity was made on behalf of the defense during the trial.

The corset, according to the Medical Record, is a very bad thing for a woman to have about her. Just note the trouble which our contemporary says it is liable to cause: Local hepatitis, hepatic calculus and colic, wandering liver, protuberant abdomen and enteroptosis, prolapse and flexion of the womb, lateral spinal curvature, anæmia, chlorosis, dyspepsia, diminished lung capacity and oxygen starvation, intercostal neuralgia, weak eyes and Bright's disease.

Slöjd (pronounced and written Sloyd, in English) is the name of a new system of technical education of children quite popular in Sweden, and beginning to attract attention in this country. It is blended with the ordinary efforts at educating the brain and teaches the pupil to be apt with his hands. Wood-carving is, thus, a part of the school work of Scandinavian children. The idea is an excellent one and we should like to see Slöjd become popular in this country.

Great is the power of the imagination. A New Orleans doctor gave to each of one hundred hospital patients, a dose of sugar and water. In a quarter of an hour he returned in a state of great assumed excitement and told them that, through a mistake, he had given them an emetic. Instantly eighty out of the hundred began to vomit. The good doctor's medicine should always act just as he says it will.

BILL NYE acted as umpire in a game of baseball between teams composed respectively of regulars and homœopaths in Minneapolis. "The common error," he declared in his report of the game, "seemed to be the same as that made in the GARFIELD case—an incorrect diagnosis as to the course and location of the ball."

Is it not a little singular that physicians will persist in speaking of the taste in the mouth? A patient was asked the other day if she had a bitter taste in her mouth in the morning. She naively replied that when she had a bitter taste it was always in her mouth. That is the only end of the alimentary tract that we know of, in which the sense of taste resides.

It may sometimes prove convenient and pleasant for the physician to know that an infant's tongue can generally be made to protrude by simply pressing the cheeks between the finger and thumb. By holding the nose for a moment the tongue will also generally come into view.

KAPOSI, who is an authority on the subject, says that a solution of one part of corrosive sublimate in thirty parts of collodion, painted on and around the base of a wart will in a short time cause the excrescence to disappear.

DR. A. JACOBI declares that the addition of salt to cow's milk will prevent its coagulation into hard masses by either rennet or gastric juice.

"Life" reports Mr. Cumso as explaining to Mrs. C. the difference between allopaths and homœopaths. "The allopaths," he says, "think the homœopaths are not ortho-docs."

An absent-minded doctor recently took unto himself a wife. During the marriage ceremony when she held out her hand for the ring, he felt her pulse and requested to see her tongue.

Book Notices.

THE PHYSICIAN'S LEISURE LIBRARY. CLINICAL LECTURES ON Certain Diseases of the Nervous System. By Prof. J. M. Charcot. Translated by E. P. Hurd, M. D., Member of the Massachusetts Medical Society, and of the Climatological Society, Newburyport, Mass.
Detroit: Published by George S. Davis.

A translation of any of the works of this well-known, instructive and able author is a boon to the English reading physicians not familiar with the French language, which they will not be slow to avail themselves of. And into no better hands could the task of translating have been committed. DR. HURD has skillfully and faithfully performed this labor, retaining much of the spirit, vigor and charm of the original lectures.

The study of nervous diseases presented with so much care and elaboration, with such vivacity of style, with such spontaneity of expression, and with such picturesqueness of language is an intellectual treat rarely vouchsafed the student of medical literature. And when you add to these excellences, reliability and accuracy of record and thorough familiarity of the subjects treated, with apposite clinical illustrations, a feeling of gratitude and thankfulness arises in the breast of the reader. Nobly and eloquently DR. HURD pays his tribute of respect and admiration to the author, in the following words: (Preface, p. xxiii) "The discoverer of scientific truth is to be envied. I can imagine no task more worthy of the human mind than the search for the unfolding of new facts in nature. And when the discovery pertains to the laws and processes of the human economy, physiological and pathological, the subject becomes one of transcendent importance, for here is something that immediately concerns our welfare, and that of all our

fellow-men. I would rather have been the author of those three works of CHARCOT last enumerated, than have written Paradise Lost, the Inferno, or Don Quixote, and this because above the literary I value the scientific, and above the æsthetic, the practical and useful. The literary man may evolve 'out of his inner consciousness,' a work of genius which shall captivate the masses, and yet shall afford nothing but pleasure and entertainment; the scientific man, on the contrary, who would find out the nature of hypertrophic cirrhosis of the liver, for instance, must make many careful autopsies and dissections, under circumstances that would be repulsive to most persons, spend wearisome hours over the microscope, perform numerous vivisection experiments on animals in order to determine the conditions of the disease, and patiently watch the results; but his recompense will be the satisfaction which he feels in his chosen pursuit, the consciousness of being useful, and the appreciation of the few whose approbation he prizes."

Very few authors can lay claim to having shed so much light on the pathological nature of the organic diseases of brain and spinal diseases, and the "dynamic" lesion of the nervous system, as DR. CHARCOT. His name for over a decade has appeared among the foremost authorities on those subjects, and his clear and original researches have elicited the admiration and approbation of the profession. And well he has merited them.

The subjects treated in the lectures under review belong to functional derangement, and every one of them deserves the most attentive study. We notice that DR. CHARCOT lays great stress on the moral and psychical element in the treatment of hysteria and kindred diseases, and we are happy to be able to corroborate the good effect of isolation, etc. The class of diseases to which he refers under the name of "dynamic lesions of the nervous system," and notably hysteria in man is much more common than is generally recognized by the profession. The reviewer remembers two cases which came under his notice in the earlier years of his practice which considerably mystified him, at first, and caused him to remark to his patients, that if they were women he would classify their malady as hysteria. DR. CHARCOT'S clinical opportunities have enabled him to establish, beyond doubt, that many people who have been considered malingerers were really sufferers from mental shock or railway accidents. On this subject he pertinently remarks: (Page 101.) "Male hysteria is, then, far from being rare. Indeed, gentlemen, if I were to judge from what I see every day among us, these cases are very often misunderstood, even by very distinguished physicians It is granted that an effeminate young man may, after certain excesses, disappointments, and deep emotions, present various phenomena of an hysterical nature, but that a vigorous mechanic, well developed, not enervated by an indolent or too studious mode of life, a fireman of a locomotive, for instance, never before irrational, at least in appearance, may, as the result of a railroad accident, a collision, a car running off from the track, become hysterical just like a woman—all this has never entered the inspiration of some people. Nothing, however, is better proved, and pathology must adjust itself to this new conception, which will hereafter take its place along with other propositions which are to-day secured as demonstrated truths, after having fought their way through skepticism, and often through ridicule."

In the name of the whole profession, we desire to return our heartfelt thanks to MR. DAVIS for the many translations from the French and German authors which he has given the profession. Were it not for his enterprise and liberality most of these foreign writers would have remained unknown to many of us, to our great loss as well as that of our patients. Price of present volume, 25 cts.

CLINICAL LECTURES ON ALBUMINURIA. By Thomas Granger Stewart, M. D., Edin.; Fellow of the Royal College of Physicians of Edinburg; M. D. Honoris Causa Royal University of Ireland; Hon. Fellow King and Queen's College of Physicians in Ireland; Physician in Ordinary to Her Majesty the Queen, for Scotland; Professor of the Practice of Physic and of Clinical Medicine in the University of Edinburgh.
New York: William Wood & Co.
Detroit: John Macfarlane.

The lectures contained in this book embrace a series of fifteen, and they cover a very comprehensive consideration of the subject of albuminuria. The forms of albumen are first discussed and the tests therefor given. Then follows a discussion of the possibility of the occurrence of albumen in healthy persons. The conclusions which he draws are to the effect that albuminuria is much more common among presumably healthy people than was formerly supposed, and that its existence is not, in itself, a sufficient cause of the rejection of a candidate for life insurance. Violent or prolonged exertion, he holds, often causes albumen to appear in the urine, and cold bathing produces or increases it in some individuals. The theories of albuminuria are discussed with fullness and clearness, as is also its occurrence in the various diseases in which it appears. The prophylaxis, and the dietetic and medicinal treatment of it and the diseases of the kidneys in which it occurs, are also fully set forth, and, on the whole, the treatise is quite worthy of the author's high standing in the profession. Those desiring to possess themselves of the latest and most reliable information on this, unfortunately rather obscure, affection, will find in DR. STEWART'S book one of the most valuable aids within reach.

Medical Progress.

THE USE OF PEPSIN IN THE TREATMENT OF CROUP AND DIPHTHERIA.—The cause and treatment of croup and diphtheria have been so freely discussed and by so many eminent men in our profession, that it almost demands an apology from one of my years to again open the subject for discussion; but as I have had so much better success in the treatment of these diseases by local solvents of the false membrane than by any other method, I shall venture to make a few remarks on the plan of treatment which I am in the habit of pursuing.

Whether we regard diphtheria as a local or systemic disease, there is no doubt but what it presents both local and systemic symptoms, and those who have adopted both local and general treatment, seem to have had the best success in combating it.

As to the general treatment I shall have little to say, but confine my remarks to the consideration of solvents for the false membrane, a number of which have recently come into use.

The use of caustics, in the form of strong acids, alkalies and the hot iron have been tried, but prove themselves such violent agents that few are willing to resort to them at the present day.

Brilliant success has recently attended the efforts of some of our most honored associates in the practice of intubation, where the life of the sufferer was threatened by the false membrane shutting off the supply of air. But this is an operation which will hardly become popular with the general practitioner, and it seems that any agent which would remove the source of danger which the membrane always presents, without resorting to the surgeon's knife, would be of immense value to the profession.

In the use of local solvents for the membrane in croup and diphtheria, it seems to me we have a remedy which would, in many cases, obviate the necessity for surgical interference and prevent the great danger which calls for such interference, if used to destroy the membrane in time.

If diphtheria be a local disease, as many claim, becoming systemic by the absorption of the local poison, surely the early removal of the source of infection is of vital importance.

If the membrane be the local manifestation of a systemic disease, it still behooves us to prevent the possible chance of suffocation by an occlusion of the trachea by false membrane till we can overcome the general disease.

In croup the membrane seems to present the chief source of danger, and the sooner it is removed and kept from reforming, the better it will be for our patient. However, as both diseases seem to present both local and general symptoms, it is probably the better plan to use both local and general treatment, but I shall consider only the former

The three agents which have been most extensively used as local solvents for the false membrane of croup and diphtheria are papayotin, trypsin and pepsin.

Papayotin is a vegetable agent recently introduced, claiming to have the same digestive properties as pepsin. I have had no personal experience with it. Dr. A. Jacobi, of New York, reports fair success by its use in a few cases. Dreyer, of Moscow, treated forty cases of diphtheria with papayotin and gives the following conclusions: First. It exercises a feeble solvent action when the membrane begins to decompose. Second. The delicate new membrane is not affected by it. Third. It exerts no effect on the mortality of the disease. Its present high price is also somewhat against it.

In the use of trypsin it is necessary to maintain an alkaline condition of the throat, as trypsin acts only in alkaline solutions. The secretions of the mouth and throat in these diseases is strongly acid, and tend to neutralize and destroy the power of the alkaline solution of trypsin.

Drs. B M. Van Syckle and J. Lewis Smith, of New York; J. A. Keating, of Philadelphia, and Saunders, of St. Louis, have all experimented with trypsin in the treatment of diphtheria with varying success, the best results being obtained when the throat was kept in a state of alkalinity by the use of the trypsin applied in spray form every fifteen or twenty minutes.

Dr. H. D. Chapin, of New York, has made some interesting experiments in the solution of croupous membrane. He says an alkaline solution, not strong enough to act as an escharotic, had no influence on the membrane, or at most produced but slight softening. Experimenting with trypsin he found that croupous membrane was dissolved in from fifteen to twenty minutes by the spray and by solution, the spray acting a little more rapidly than the solution. A solution of trypsin required five hours to dissolve the mucous expectoration of phthisis.

Pepsin solutions have been less used and less experimented with than trypsin, and yet this solvent seems likely to give far better results when it does come into more general use.

A solution of pepsin will dissolve croupous membrane outside the body in from fifteen to thirty minutes, acting as well as trypsin, with the very important advantage that it does not require an alkaline solution. The reaction of the fluids of the mouth and throat in croup and diphtheria is markedly acid, and the great majority of local medicinal applications in general use are acid, hence the combination of pepsin with acid fluids can be more easily accomplished than the efforts to keep up an alkaline condition for the use of other solvents.

Another very important point of difference is in the number of applications required.

To keep up an alkaline condition for the action of trypsin, requires its application every twenty or thirty minutes, and all will concede how trying it must be to patient and nurse to spray an unruly child's throat so frequently.

On the other hand, the pepsin solution acts rapidly, needs to be applied much less frequently, and there is little tendency to a return of the membrane after it is thoroughly dissolved.

Speaking of solvents, DaCosta says: "The remedy that has done best is a saturated solution of pepsin in the form of a spray."

But a spray is a terror to most children, especially infants, and many practitioners are deterred from using any remedy, however useful, which has to be employed in that form. In my own practice I always use a swab or sponge, on a bent rod, applying the solution of pepsin freely to the diseased surfaces, every

one, two or three hours, according to the severity of the case and quantity of false membrane present.

The objection to the probang may be made that a child does not submit to its use any more gracefully than to that of the spray; but it takes but a moment to make the application, even if force be necessary to accomplish that object, and the effects are more lasting than those of the spray, necessitating its use much less frequently.

Previous to the use of the pepsin it was my custom to use the muriated tincture of iron as a local application, and I find now that a solution of pepsin in tincture of iron is the best form of the remedy I have tried.

In regard to the form of pepsin, allow me to say that I have used several and find that those which come in a scale or crystal form, so-called, are the most active; the powdered form being difficult of solution and not seeming to possess the energy of the former.

Having considered briefly the agent and its application, I shall crave your time a few moments longer, to consider its effects in a few cases of which I have made notes.

In two cases of membranous croup, in which the membrane was present to such an extent as to cause great difficulty in breathing, with inability to speak above a harsh whisper, the use of the swab with one drachm of pepsin to the ounce of tincture of iron, at first every half hour, afterwards every two hours throughout one night, caused the membrane to disappear by morning, leaving a bright red surface.

The applications were continued every three or four hours during the next day and broken off gradually.

In the most difficult case, a boy two years old, was making desperate efforts to get sufficient air when first seen. I remained long enough to make three applications of the medicine and then left for home, the child having fallen asleep and being able to breathe without much difficulty.

In a larger number of cases of diphtheria treated by the same solution of pepsin and iron, the membrane became dissolved and expectorated or bushed off by the swab, in from twelve to twenty-four hours, leaving a reddened patch of mucous membrane, which soon healed over.

In one of these cases the patient, a lady of twenty-five years, had an attack of tonsilitis, a troubles he had been subject to every winter for a number of years.

The abscess was lanced, poultices applied externally and quinine given internally, with a gargle for the throat.

She progressed well until the third day, when she unwisely exposed herself to cold and dampness, and a marked case of diphtheria supervened, the membrane forming on the wound where the tonsil had been lanced and spreading to the uvula and pharynx. Applications of pepsin and iron were made every three hours, and in less than twenty-four hours the membrane was completely dissolved and she made a rapid recovery.

In another case of a girl fourteen years old, a mixture of tincture iron and *powdered* pure pepsin was used with little effect, but when this was changed to a saturated solution of the crystal pepsin in iron, the membrane rapidly yielded.

It seems unnecessary to state the history of each individual case, as they present such a similarity; the false membrane becoming dissolved in from twelve to twenty-four hours, leaving a healthy, healing surface.

The question may be asked whether the internal treatment employed may not have as much to do with the favorable results as the applications of pepsin.

I would say that it has been my general practice for the past seven years to employ quinine and a mixture of sulphur, sulphurous acid and glycerin internally in diphtheria, and and anti-febrile and mercurial remedies in croup, with stimulation in most cases.

Two years ago I began the use of solutions of pepsin locally, with the same general treatment, since when my cases have made a more rapid and better recovery than when the same treatment without the pepsin was administered.

In closing, allow me to say, I appreciate the small value which must attach to so meager a report, but I have had the remedy but a short time under observation, and only present these few remarks, hoping it will lead others to make fuller experiments with a therapeutic agent which may prove a valuable addition to our means of combating such violent and fatal diseases as diphtheria and croup.—Dr. A. J. C. Saunier, in *Western Med. Reporter*, Oct, 1888.

QUEBRACHO IN DYSPNŒA.—In a copy of the Therapeutic Gazette, the date of which I do not now remember, appeared an article setting forth the good effects of quebracho (Aspidosperma quebracho) as a remedy for dyspnœa. The article attracted my attention the more forcibly from the fact that I had some weeks previous experienced a great deal of trouble from a case in which dyspnœa was the prominent symptom, and had found nothing that gave permanent relief. The article referred to gave such glowing accounts of the efficacy of the new drug in dyspnœa from any cause, that I determined to procure a sample and give it a thorough trial in the first case coming under my observation. I accordingly wrote Parke, Davis & Co., who sent me a small quantity of both the solid and fluid extracts, sufficient to test its merits. That was five or six months ago, and since then I have used the drug in several cases, and with such uniformly good results that I feel constrained, for the benefit of my brother practitioners, to report my experience in its use, which has been such as to give me great confidence in its efficacy. In the "Working Bulletin" on this drug, sent out by Parke, Davis & Co., I find that a few observers report disagreeable effects, such as "headaches, partial unconsciousness, dizziness, and copious salivation," following its continued use for any considerable length of time. These unpleasant secondary symptoms I have not observed in any of the cases in which I have used the drug, although prepared to encounter them by the experience of others. It is very probable that the size of the dose and the manner of exhibiting it have much to do with the production of those untoward effects, and that a proper regulation of these would enable us to obviate them entirely. The statement that "the frequency of respirations is diminished by the drug, the more decidedly the greater their ex-

cess has been over the normal condition," I have verified in my cases. In other words, those cases characterized by violent dyspnœa with marked cyanosis are more rapidly and certainly relieved than are those in which the symptoms are less urgent.

Up to the present time I have used the drug in seven cases, distributed as follows: One of abdominal dropsy, causing dyspnœa; two of chronic bronchitis, with pulmonary emphysema; and four of tubercular disease of the lungs; and in all of them it was beneficial to a degree beyond my expectations, in no case failing to materially increase the comfort of the patient. I select one case from each class for report.

Case 1.—Mrs. L. W., aged 38, mother of five children, had been in bad health for several years, and in the fall of last year (1886) she began to suffer from ascites. During the past winter she would have frequent attacks of dyspnœa due to the dropsical accumulation in the abdominal cavity, which finally became so severe as to seriously alarm her friends. All the usual remedies had been tried, with little or no benefit, by the practitioner who had charge of the case, and at his suggestion I was called in consultation. In connection with treatment for the relief of her general condition, she was put upon the solid extract of quebracho in two-grain doses for the relief of the dyspnœa, given at the time an attack was threatened, and repeated as often as was indicated, with the result of affording almost complete relief from the most distressing symptom.

The sample I had obtained was soon exhausted, when I ordered a fresh supply, as the patient was enthusiastic in its praise, declaring that it "was worth its weight in gold." Its use was continued in this case until the cause which had produced the symptom for which it was given was removed by appropriate treatment, and she is now fully restored to health. Its action in this, the first case in which I had used the drug, was remarkable; the difficulty of breathing was at times so great as to be alarming, when two grains of the solid extract was sufficient to give almost immediate relief, without any bad effects whatever.

It had no action upon the pulse in this case, except to render it a trifle more full without effecting the rate.

Case 2.—A negro man, of more than the ordinary intelligence of his race, forty years of age, and by occupation a farmer, has been a sufferer from bronchial catarrh, with emphysema, for the past two or three years. He is able to walk about, but the least exertion gives rise to a difficulty of breathing which is very distressing. He had been under my care about eighteen months before I had obtained the quebracho and no remedy that had been administered had been capable of preventing or cutting short the attack of dyspnœa. Upon the occasion of his first visit to my office after I had obtained the drug, I gave him the entire sample of the fluid extract, about one ounce, with instructions to take a teaspoonful whenever he felt the difficult respiration, and also take a dose just before undertaking any of the small tasks which had previously given rise to an attack. Several days subsequently he returned for a fresh supply, saying that it "had acted like a charm," and that with it he was able to walk about his farm and attend to its management without experiencing to any great degree the ill effects which had previously followed the slightest exertion. He seemed greatly disappointed upon hearing that he had exhausted the supply on hand, but this feeling was somewhat mitigated when he was informed that I would give him the same drug in a different form. I accordingly gave him a lot of gelatin capsules, each containing two grains of the solid extract, and instructed him to use them in the same way—*i. e.*, to take one capsule whenever an attack of dyspnœa was threatened, and also to take one just before engaging in work of any sort. He has now been taking it perhaps six months, and while his general condition is not much changed for the better, by taking the quebracho as directed he is enabled to prevent or cut short the attacks which had, previous to his beginning its use, made his life a burden to him.

Case 3.—Mrs. M. E., a widow lady, aged 63, of a tuberculous family, was treated twenty years ago by her family physician for phthisis, and with such success that she gradually regained her health to the extent that she was enabled to attend to her household duties. But the germs of the disease were not entirely eradicated from her system, and for the past four or five years she has been a sufferer from that dread disease. It is unnecessary to give a minute description of her physical condition at the time she came under my care; suffice it to say, that she presented all the symptoms of a fairly well-developed case of pulmonary tuberculosis. Upon awakening in the morning she would be seized with an attack of coughing, accompanied by great dyspnœa of an asthmatic character, which would last sometimes for several hours, and, passing off, would leave her in a greatly weakened condition. Under appropriate treatment the cough was considerably relieved, and she seemed better in every respect, with the exception of the dyspnœa, which continued to return at regular intervals, and at times was so severe as to be alarming. At this juncture I determined to give the quebracho in combination with remedies for the relief of the cough, and accordingly wrote the following:

℞ Syr. prun. virg.,
Syr. tolutani,
Ext. quebrach. fld., ää ℥ j.
Acidi hydrocyanici dil., gtt. xxiv.
Morphinæ sulph., gr. iss.

M. Ft. sol.

Sig. Take a dessertspoonful as often as necessary to afford relief.

After the first two doses, each containing two-thirds of a drachm of the quebracho, the difficulty of breathing was very considerably reduced, the respirations sinking from 45 to 24 per minute in three hours, and by continuing it according to directions she was enabled to enjoy a longer period of comparative ease than she had experienced for months.

As before mentioned, these asthmatic attacks showed a tendency to come on in the early morning shortly after awaking from sleep, and, with the object in view of preventing them if possible, I gave this prescription:

℞ Ext. quebracho, gr. xviii.
Morphinæ sulph., gr. iss.

M. Ft. pil. No. xii

with instructions to take one pill every morning as soon as she awoke, and before attempting to rise, to be repeated in an hour or two if required. While this did not prevent the paroxysms entirely, it had the effect of shortening them very materially and lessening their severity. The good effects observed from it were sufficient to induce her to continue its use for two months, at which time she removed to a neighboring city and passed from under my care.

In conclusion, I would say that, while my experience with this drug is as yet limited, it has been such as to give me confidence in its power to relieve a great degree this distressing condition which so often complicates the diseases of the respiratory and circulatory systems, and to convince me that it is entitled to more extended use in all cases in which dyspnœa is a prominent symptom, no matter what may be the primary cause.

As to its mode of action, the theory of Penzoldt, which is that the drug, by its peculiar influence exerted directly upon the blood enables it to absorb more than its usual quantity of oxygen, is probably the correct one.—Walter P. Ellis, M. D., in *Progress*, Oct., 1888.

Mullein in the Treatment of Malarial Troubles.*—This brief paper is intended to draw attention to the remarkable results obtained, in certain sections of the South, during the war between the States, in the treatment of malarial fevers, by means of a very common and homely plant, mullein (verbascum thapsus of Linnaeus). Perhaps it is wrong to speak of it as a "homely" plant, because it seems that all of its family seen in this country (some three varieties), have been imported from Europe. "Familiar," would give a better description. Although not an adult, during the earlier years of the rebellion I was old enough to note the singular effects of this herb as used in the treatment of malarial troubles. Quinine amongst us in those days was a luxury which few could command. My temporary home was on the Upper James River, in Virginia, in a neighborhood in which chill and fever was anything but a rarity. Mullein was the resource under these circumstances, and proved to be by no means "a broken reed." I will try and give evidence of this, by direct testimony other than my own, later in my paper; regretting that (owing to the state of things then existing) it is not medical testimony, strictly speaking. I have neglected this subject because our dispensatories, while placing verbascum quite conspicuously in their secondary list, and according to it a catalogue of virtues, are singularly silent as to its antimalarial properties. Wood, Bartholow, and Lauder Brunton ignore the vegetable altogether in their treatises upon Materia Medica.

Francis Peyre Porcher, in his well-known work, "Resources of the Southern Fields and Forests," says (Edition, 1869), "Of the order scrofulariaceæ (fig-wort-tribe), generally acrid and bitterish, sometimes dangerous in their properties, is mullein (verbascum thapsus-walt), diffused; grows in pastures upper and lower districts, flowers in July" (a number of references given here); "The leaves of the flowers contain a narcotic principle. A decoction of the flowers and leaves (as tea), is beneficial in dysentery and tenesmus; it calms pain in the fundament, caused by hæmorrhoids; and it is used in the convulsions of infants; in ardor urinæ, and where ever the indication is to moderate spasm or irritation. A large quantity of the flowers will even induce sleep, so active is the narcotic principle it contains." (References given). This distinguished author then, after enumerating a number of diseases in which the plant is useful, and ascribing its value to "anodyne, emollient and gently astringent qualities," alludes to its employment in taking fish (the seeds being fed to them). I will not weary you by referring to a number of other complaints, in which he states that mullein has been found useful, but pass on to the following passage: "Equal parts of mullein leaves and the bark of the root of sassafras, boiled in water and concentrated, then mixed with powdered sassafras bark to form pills, are reputed valuable in the treatment of agues by herbalists." (See Indian Guide to Health). Surgeon Hinckley has reported several cases, in which the paroxysms of intermittent fever were completely prevented by the administration of the warm infusion of the fresh root; (4 ounces of the fresh root to one pint of water, reduced one-half by boiling; of which 2 ounces were given every hour, commencing four hours previous to the expected chill). (*Confederate S. Med. Journal*, January, 1864)."

My own recollection of the efficacy of this herb, so strongly corroborates the observations of Surgeon Hinckley that I am entirely unwilling to resign it to the "herbalists." Within a few days past I have written to a lady (the wife of a Confederate officer of rank), whose practice, with mullein, was notably successful in my neighborhood, to ask her experience; and that she would give me her recipe. Her reply was prompt, and I give it to you at length:

℞.—"Beat mullein leaves in an iron mortar; strain; and to the juice add an equal quantity of French brandy; in a wine-glass of this mixture put fifteen drops of spirits of camphor, and give just as the chill is coming on. The patient must be warmly covered and in bed before taking, and continue so for several hours after. Now for my experience: When I was told of it my husband had been having chills for seven years. I mean he had never been free from them more than a week or two at a time during that period. He would not consent to try this remedy, until one day after taking 40 grains of quinine, he had a chill which was so severe that we both feared congestion, and he said he would try anything. So after the chill had reached its height, I had the leaves gathered and beaten and gave him a dose. As soon as he swallowed it the moisture began to break out on his brow; and in five or ten minutes he was in a most profuse perspiration. He had not the least fever, and did not have another chill for fifteen years. I tried it after that, in, I suppose, fifty cases, *with perfect success*. Our physician in the

* Read in the Section on Practical Medicine, at the Thirty-ninth Annual Meeting of the American Medical Association, May, 1888.

neighborhood, (Dr. R. K. T.) used to laugh at me about it very much; but the last time I saw him he told me that during the war, when he could not get quinine, he had to resort to it, and found it most efficacious, not only in cases of chills, but in bilious and typhoid fevers. Of course he could not get brandy at that time, but used whiskey instead, and usually, the commonest kind. I am glad to hear that you are going to sing the praises of this wonderful plant."

I know very well that the carping reader or listener, as the case may be, will object to my adducing lay evidence of this sort, in a paper relating to a scientific subject. I know, too, that he will consider that the case notes detailed savor of inaccuracy and enthusiasm. Such a one, however, is ignorant of the peculiar state of things existing in the South, during the days of Slavery. In regard to the first proposition, he will have to be informed of the especial relations occupied by the cultivated wife of the large Southern planter to her husband's slaves ("servants" as we were taught to call them). This information, happily, I can give from the pen of a distinguished foreigner, the Marquis de Chastellux, a general officer under the Comte de Rochambeau, in the Revolutionary War. This accomplished gentleman after the surrender at Yorktown, made a tour of the Union and Canada; and the edition of his delightful work (from which I quote) was published in 1827, by White, Gallagher & White, No. 7 Wall Street, New York. On page 282, after describing the beauties of Westover, the old homestead of the Byrd family, on the James River (well-known in our day as part of McClellan's entrenched Camp), and after numerous tributes to the elegance and hospitality of his hostess, Mrs. Byrd, he says: "This lady takes great care of her negroes; makes them as happy as their situation will admit, and serves them herself as a doctor in time of sickness. She has even herself made some interesting discoveries in the disorders incident to them, and discovered a very salutary method of treating a sort of putrid fever which carries them off commonly in a few days, and against which the physicians of the country have exerted themselves without success." In reference to the case detailed in the letter quoted, in which chronic malaria was gotten rid of by one treatment, astonishing as the result was, I can testify to a similar instance in my father's household, in which quinine had failed, and a successful result was obtained by the use of this lady's mullein-juice preparation.

Undoubtedly, our Pharmacopœia is already over-freighted with drugs and remedies, many of them inert or unnecessary. But in calling attention to this one, I am not introducing a new title. The plant is already "on the list." No one has greater faith than I in the virtues of cinchona and the salts of its alkaloids, especially quinine and cinchonidia, but, unfortunately, we are now and then compelled to refrain from their use by reason of personal idiosyncrasy. One man is known to me, in whom such alarming hæmaturia occurs after one dose of quinine that he cannot be induced to take it. I have known this symptom to follow a dose clandestinely given by his physician, who doubted the alleged effect We are all accustomed to see troublesome rashes resulting from quinine and other agents of its series, as well as nervous phenomena, in some patients, which positively inhibit their employment. In the case of a very prominent geetleman, who recently died in this city and who suffered from congestive malaria, his physician gave quinine, perfectly assured from previous knowledge of the idiosyncrasy of his patient, that the nails would be shed. He told me the result was as anticipated, nails dropping out and skin desquamating. Arsenic stands us in good stead as a substitute in chronic cases; and Warburg's tincture is popular with some practitioners, in acute cases. Gelsemium and other resorts we undoubtedly have; but I am sure that an antiperiodic possessing the value which I am confident pertains to this drug, would be gladly welcomed by one and all of us—and I should feel much gratified if our enterprising manufacturing pharmacists should be led to develop its active principles, so as to offer us a convenient form of administration.—GEORGE BYRD HARRISON, M. D., Washington, D. C. in *Jnl. Amer. Med. Assoc'n*, Nov. 10, '88.

GLYCERIN CLYSTERS.—It is now about a year since glycerin, which has been employed by internal administration for a long time with more or less effect for the relief of constipation, was first recommended for this purpose in the form of enema. Anacker's so-called minimalclysmata (Deutsche med. Wochenschr., p. 823, 1887) and Unger's microclysmata (Pharmaceut. Centrallhalle, Berlin, 1887, 42), described nearly at the same time, immediately attracted the attention of practising physicians throughout the world. Numerous clinicians have reported the results of their use of glycerin in this manner in hospital and private practice. It is obvious that a condition so influenced as is constipation by individual peculiarities, habit, mode of life, diet, drink, and exercise; a condition frequently in itself a symptom of constitutional or of local disease, is sure to yield uncertain results when subjected to investigation by the numerical method. We may, therefore, reasonably demand more than mere statistics of successes and failures following the administration of minimal clysters of glycerin from those who, as von Vomossy, Seifert, Reisinger, Boas, and Mayer, of Wilkesbarre, have published accounts of their experience with this treasment.

Ullmann, of Vienna (Centralblatt für die Gesammte Therapie, August, 1888), has investigated this method of treating constipation with regard to the following points: 1, the general condition of the patient, with special reference to the disease from which he suffered, the state of the digestion, the presence or absence of habitual constipation and the objective phenomena relating to the intestinal canal; 2, the dejections, as regards amount and consistence; 3, the time elapsing between the administration of the enema and the effect; 4, the subjective sensations of the patient, as regards abdominal pain, local irritation, and increase of previous pain; 5, unusual manifestations, as colic, mucus or blood in the dejections; and, finally, 6, the time and consistence of the next following spontaneous evacuation.

Regarding quantity, the result was variable. After 226 injections, the discharge in 71, or 34.4 per cent., was abundant; in 103, or 45.5 per

cent., it was incomplete; in 52, or 23.1 per cent., there was either no result or a mere scanty intestinal secretion mixed with the injected glycerin. It was further found that in females and in persons suffering from a tendency to habitual constipation and after repetitions of the treatment the result was in general less satisfactory than in the case of males, in mere transient constipation, as, for example, that occurring in fevers, and in single or infrequently repeated administrations of the glycerin.

The consistence of the discharge was, in 145, or 83 per cent., of the 174 cases in which the treatment was effective, hard, the stools being either formed or composed of masses of scybala; in 22 cases, or 13 per cent., the stools were mushy and unformed; in only 7 cases, or 4 per cent., were they watery. The last occurred in patients subject to diarrhœa.

Subsequent constipation lasting, when untreated, five or six days, occurred in 68 of the 174 instances, 39 per cent. Subsequent diarrhœa occurred in 6 cases, 3 per cent. These were individuals suffering from visceral tuberculosis. And in 3 of them, post-mortem examination revealed the existence of tuberculosis of the intestines.

Painful sensations before, during, or immediately after defecation were complained of in only 5 instances—4 cases of recent parametritis, 1 of retroversionof the uterus, and 1 of chronic tuberculous peritonitis. Careful inquiry, however, elicited the fact that a trifling burning sensation in the anus was not infrequent after defecation, but that it usually subsided in a few minutes.

The infrequency of borborygmi, which were spoken of by only 9, or 4 per cent., of the patients, Ullmann ascribes to the same cause as the non-escape of flatus, namely, the failure of the intestine above the rectum to participate in the response to the activity of the glycerin.

It is, in this connection, worthy of note that in a majority of the cases in which the glycerin enemata failed, rectal examination and abdominal palpation showed on the one hand a relaxed and atonic condition of the lower bowel; on the other hand, an upper portion of the intestinal tract to be the seal of the fecal accumulation.

In such cases large enemata of water or purgatives administered by the mouth were followed by more or less copious evacuations. The failure of glycerin is explained by the peculiarities of its action. This Anacker ascribes to the powerful irritating effect of the glycerin, due to its avidity for water, upon the mucous membrane of the rectum. This irritation causes a local hyperæmia with fluxion to the mucous membrane and reflex intestinal peristalsis. Reisinger, who found that other substances having avidity for water, as, for example, concentrated saline solutions, gave negative results, concludes that it is not this property of glycerin, but some other peculiar chemical attribute of that substance to which its efficacy in this respect must be ascribed. Unger holds the opinion that the glycerin produces its effects by reason of the profuse hypersecretion which it provokes; and in this opinion Ullmann coincides. The last observer, however, believes that the peristalsis excreted is restricted to the lower portions of the large intestine. This opinion is based upon the almost invariable failure of the administration when the rectum is either empty or relaxed, upon the absence of borborygmi, upon the rare occurrence of flatus or colic, upon the immediate cessation of tenesmus as soon as the glycerin has been voided, and, finally, upon the infrequency of repeated liquid evacuations.

As a rule, the action of glycerin is prompt, the result following, in the large majority of instances, in from three or four to fifteen minutes. The dose administered varies from 3 to 6 grammes (that is, from 45 to 90 minims). Ullmann concludes that glycerin thus administered exerts a specific action upon the lower bowel, an action unattended by unpleasant sensations or unfavorable influences; that it is especially available when it is desirable to evacuate the lower bowel promptly, as before surgical operations, in accouchement, for purposes of rectal and vaginal investigations and the like. This method is also available when it is desirable to empty the lower bowel without exciting extensive peristalsis, as in cases of internal hemorrhage, hæmoptysis, painful affections of the abdomen, or when, for any reason, it is undesirable to change the position of the patient in bed. In intestinal obstruction or fecal accumulations in the small intestine or in the upper part of the large intestine, or where constipation is due to acute or chronic catarrhal processes in the small intestine, or in obstruction by gall stones, glycerin injections are without effect. They are, by reason of the pain which in such conditions they occasion, contraindicated in ulceration of the rectum and painful inflammatory affections of adjacent parts, as acute prostatitis, parametritis, cystitis, and analogous processes.

In habitual constipation, glycerin injections are to be used for occasional relief, never habitually. The amount of irritation which they occasion, as shown by copious serous and mucous discharges containing numerous epithelial cells, indicates a danger that their too frequent use may cause local inflammation or ulceration.

We may add that we have thus employed glycerin with equally satisfactory results in the case both of infants and adults in hollow suppositories of cocoa butter—a more convenient method.—*Med. News.*

On the Severe Vomiting of Pregnancy. —The author discusses particularly the state of the uterus in association with severe gravid vomiting, analysing in a series of tables, reports of over 50 cases, where changes in the uterus were noted. In 5 cases there was inflammation of walls of lining of gravid uterus. In 2 inflammatory cellulitic tumors, uterus being also anteverted or anteflexed. In 11 cases uterus retroverted or flexed, impaction or incarceration being a marked feature. In 30 gravid uterus was anteflexed or anteverted: in 17 of the 30 cases it was also inpacted or incarcerated in the pelvis: in 6 cases there was "detention" of the uterus in the pelvis. In 12 cases there was induration or thickening of the cervix uteri, and in most of these 12 cases uterus was also anteflexed.

The cases analysed exhibit the remarkable frequency with which impaction, incarceration, or detention of the gravid retroflexed or anteflexed uterus is associated with severe sick-

ness, also the importance of thickening and induration of the cervix. Incarceration or impaction of gravid retroflexed or retroverted uterus is well-known and admitted as a serious condition, but the facts recorded show that anteflexion also is liable to be attended and associated with very marked impaction of the gravid uterus in the pelvis; and further, that this association of anteflexion and impaction is liable to be associated with severe vomiting in pregnancy. The impaction was in some of the cases so severe that it could not be released.

The importance of the impaction as a factor is shown in the results of treatment. Nine of the 11 retroflexions were at once relieved by replacing the uterus. In 11 of the anteflexion impaction cases when impaction was not or could not be removed death took place in three instances. In 6 of the 11 cases abortion was induced, with 2 deaths. In 2 of the 11 natural abortion, 1 died. In 17 anteflexion impaction cases 6 cases were effectually treated; by manual effort in 4, by rest, etc. in 2, cure in all 6 cases. In 6 "detention" cases manipulative reduction in 4 cases, in 2 natural elevation, cure in all six.—Graily Hewitt, M. D., in *Med. Press and Circ.*, Oct. 24, 1888.

Calomel in Phthisis.—The observation is somewhat trite that in therapeutics empirical measures of recognized value are, with widening knowledge, often found to have a scientific basis. The present generation of physicians has as little personal knowledge of the indiscriminate use of calomel as of indiscriminate bleeding, and it is fortunate that this is so. This generation, however, knows that there are occasions in which prompt and free phlebotomy means the saving of a life, and, therefore, still carries the thumb lancet in its pocket-case. Not less does the doctor of to-day recognize in calomel, rightly used, an important remedy in certain of the acute infectious diseases. At the same time, its dangers and its uselessness, as once employed, are too well known to permit of anything like a revival of the old methods of prescribing it.

The use of calomel in pulmonary phthisis was common in the early part of the present century. Many authorities regarded it as almost a specific remedy in this affection. Among these may be named Delafield (1818), Dessault (1809), Mecker (1822), Chricton (1823), Clark (1836), and others. Trousseau considered calomel useful in laryngeal phthisis where there was no underlying syphilitic cachexia, and where other remedies had failed. Broussais, Andral, and others advised the use of quicksilver in certain forms and at various periods of consumption. Hufeland considered quicksilver as much of a specific in scrofulosis as in syphilis.

For a half century the use of mercurials in phthisis seems to have been forgotten. Recently, however, the attention of the profession has been very generally drawn to the anti-parasitic action of the preparations of mercury in the treatment of bacillary phthisis. Auber and Gougenheim (1886) injected corrosive sublimate into lung cavities; Lepine used the same treatment in croupous pneumonia; Barthal and Moritz used mercurial inunctions in pneumonia; Kubassof employed this treatment in the management of consumption as first advised by Plasse. Plasse's work is especially noteworthy as resting, to a certain extent, upon experimental research. He found upon inoculating rabbits with tuberculous matter, that those animals previously treated by mercurial inunctions developed very few tubercles, or escaped altogether. The favorable influence of small doses of calomel upon certain forms of anæmia is well known. Cases are occasionally observed in which the prolonged administration of iron having failed, rapid improvement takes place under a treatment of calomel, with improvement of appetite, relief of habitual constipation, and restoration of the menstrual function. Especially is this method of treatment useful in the anæmia of syphilis, as pointed out by Keyes, and in the anæmia of "scrofulosis" and pulmonary consumption.

Quite recently Martell (Prag. med. Wochenschr., No. 25, 1888), and Dochmann (Therapeut. Monatsh., September, 1888), have published communications on the important subject of the calomel treatment of tuberculosis. J. C. Wilson, at about the same time, reported some clinical studies in the treatment of enteric fever and pulmonary phthisis by hypodermatic injections of calomel at the recent meeting of the Association of American Physicians in Washington (Medical News, October 13, 1888).

That calomel administered by the mouth or hypodermatically exerts a favorable influence in certain cases of tuberculous disease, there is no room to doubt. Whether it exerts a specific action upon the local pulmonary lesions, or upon the growth and development of the tubercle bacilli, cannot at present be asserted. With the exception of Wilson, those observers who have published their investigations into this method of treatment since its recent revival, incline to the view that the favorable influence of calomel is due to the direct germicide action of the mercurial salts. Dr. Wilson regards it as probable that the mercurial salts, even in small amounts, act upon the tissues rather than upon the germ themselves, and suggests that this action is preventive, tending to retard or prevent the splitting up of the complex chemical compounds of the tissues and the production of ptomaines, and that this increased resistance on the part of the tissues, by opposing processes necessary to the growth and multiplication of pathogenic micro-organisms, stands in the way of their continuous development. Whether the mercurial salts, administered by the mouth or hypodermatically, enter the circulation in the form of an albuminate of mercury, or in the form of a double chloride of mercury and sodium, has not yet been established. Torsellini (1886) has shown that pepsin in the presence of small amounts of hydrochloric acid greatly increases the solubility of calomel, without converting it into mercuric chloride, and concludes that the solution is the result of a ferment action of pepsin upon the calomel.—*Medical News.*

Saccharin in Ammoniacal Urine.—At a meeting of the Royal Academy of Medicine of Ireland, the president, Dr. James Little, read a short paper ("Dublin Jour. of Med. Sci.," June, 1888, p. 493; "Glasgow Med. Jour.," Sept.,

1888, p. 260) on the use of saccharin in preventing ammoniacal change in the urine. For the past three years, he said, he had seen from time to time a lady, nearly eighty years of age, who was quite confined to bed in consequence of chronic disease of the bladder, which gave rise to frequent and painful calls to pass water. The urine always threw down a copious purulent sediment, and, except when decomposition was prevented by treatment, was always ammoniacal. Phosphatic calculi had many times been passed, with great suffering, and no doubt many such exist in the bladder. Quinine and boric acid, when taken in fair doses, always purified the urine; but, about three months before, her stomach had become so irritable that these drugs could not be borne; nor could washing out of the bladder with a weak warm sublimate solution be longer practiced, as the passage of the catheter had become exquisitely painful. The consequence was that the urine became excessively offensive. In this difficulty it occurred to Dr. Little to try saccharin, and he ordered six tabloids daily. In three or four days the urine was no longer offensive. The patient had continued their use ever since, and the urine had not again become ammoniacal, though there had been little, if any, diminution in the quantity of pus contained in it. Four other cases had been observed since. They were all in males; one was a case of catarrh of the bladder in a paraplegic gentleman; one a case of chronic cystitis, with enlarged prostate; and two cases of ammoniacal urine after stricture. In all, the saccharin had been distinctly useful, combined with the daily use of a catheter, so as to prevent the accumulation of residual urine in the bladder. Saccharin had no effect on the cystitis, except so far as the cystitis was kept up by the ammoniacal condition of the urine, and it was only in correcting that condition of the urine that it was of use.—*N. Y. Med. Jour.*, Nov. 3, 1888.

THE POISONOUS CHARACTER OF CREOLIN.—While in the first stage of the history of creolin, the fact was emphasized, especially by the producer, that it was not poisonous, and at the same time possessed a greater power of disinfection than other materials, voices are now heard which maintain the opposite.

As is shown by Behring (Deutsche Militär-Erztliche Zeitschrift, 1888, part 8), creolin is not free from danger in continued use with the larger animals and man. Penzholdt expresses himself similarly. Hiller likewise reports that the freedom of creolin from poisonous characteristics, is not unqualified. The so-called unpoisonous nature of creolin is only the result of its slight solubility; on mixing creolin with water, the former is not dissolved, but only finely divided. The antiseptic action of creolin is, according to Behring, very slight with albuminous liquids; a 2 per cent. aqueous creolin solution, employed for the disinfection of infected wounds, wound secretions and pus, proven altogether inadequate.

According to the statement of Rosini (Therapeut Monatshefte 1888, 480) a woman, treated with numerous washings of the uterus with 2 per cent. creolin emulsion, died, giving evidence of phenol poisoning.

Greater reserve should be shown with respect to a remedy, of which it is not known as yet whether a uniform product is supplied, or may be made at all.—*Pharm. Centralhalle*, Nov. 8, 1888, p. 557.

THE CURATIVE ACTION OF CASCARA SAGRADA.—Bufalini reports none but favorable results from the action of cascara sagrada, the name by which the bark of rhamnus purshiana is designated. In seven cases of habitual constipation, treated with it, he secured the desired evacuations. In one case in which 5 g. of the dry extract was consumed, and the use had been discontinued after six weeks' trial the former condition returned within the following two months, but in a lesser degree; for, while before treatment, a passage had occurred, on an average, only once in eight days, after treatment the average interval between two evacuations was only two days.—*Annali di Chem. E di Farm*, Feb., p. 88.

SIMULO.—Prof. Eulenburg has given the tincture of simulo which had previously been recommended by White and other English observers as an efficient anti-epileptic and anti-hysteric remedy, a thorough clinical trial, and has come to the conclusion that the drug does not deserve the praise bestowed upon it. As an anti-epileptic drug simulo is absolutely worthless, while as an anti-hysteric remedy it is of but little more importance. Eulenburg says that simulo is far less valuable in these affections than the bromides, and, in his opinion, can only be utilized as a substitute of the bromides where these for some reason or other are contraindicated or are ill borne.—*Therapeutische Monatshefte.*

THERAPEUTIC APPLICATION OF MANACA.—Manaca, or mercurio-vegetal, is the Brazilian name for Franciscea uniflora of the natural order Scrophulariaceæ. The fluid extract is said to be antisyphilitic, purgative, diuretic, emmenagogic, catalytic, and antirheumatic, especially indicated in syphilis, scrofula, meningitis, and rheumatism in any form.—*London Lancet.*

HOT-WATER IRRIGATION IN EPISTAXIS.—In a severe case of epistaxis, in which the blood forced its way through the lachrymal puncta and through the plugs, Alvin, of Mont Dore, after removing the latter, injected water heated to about 155° F. The bleeding was checked after a couple of minutes, the operation being painless, notwithstanding the high temperature of the water.—*The Patellite.*

PICHI.—The therapeutical parts of Fabiana imbricata are best extracted in a fluid medium, and this fluid extract has been prescribed with success in the treatment of renal colic, prostatitis, cystitis, and catarrhal inflammations.—*London Lancet.*

QUEBRACHO IN PHTHISIS DYSPNŒA.—Dr. J. P. Baird, Greenville, Tex. (Therap. Gaz.), has found that twenty minim doses of fluid extract of quebracho give excellent results in the dyspnœa of phthisis.—*Medical Standard*, Oct., 1888.

The Medical Age.

Vol. VI. DETROIT, DECEMBER 26, 1888. No. 24.

Original Articles.

A STATISTICAL EXAMINATION AS TO THE USE OF ERGOT IN PARTURITION, WITH REFERENCE TO ITS PRODUCTION OF FŒTAL DEATHS AND OTHER ACCIDENTS.

BY E. P. CHRISTIAN, M. D., WYANDOTTE, MICH.

They who have given no special attention to the subject, can not know how little reliable information is to be derived from medical literature in regard to the ratio and causes of fœtal mortality, that is of still-births of viable children. Reports of maternities, hospitals and of private obstetric practice are not silent as to rate and causes of maternal child-bed mortality; but as regards the infant mortality, there is to the student of the subject an embarrassing, and sometime a suggestive, not to say a suspicious, silence.

In a paper read before the International Medical Congress at Washington in September, 1887, entitled "Still-births, Ratio and Causes," I gathered from medical literature, and quoted, reports of numbers of practitioners reporting series of several hundreds of obstetric cases, their accidents, complications, etc., with the statement that in many of them no cases of still-birth occurred, and others were entirely silent upon this point.

In that paper I have showed, that from the normal ratio of occurrence of various complications and accidents of labor, necessarily fatal to the child in a large proportion, the practice so reported was either exceptional and more remarkable from the non-occurrence of the normal ratio of these accidents and complications; and hence unreliable for statistical purposes in this respect at least, or else that cases of unavoidable fœtal death were eliminated from such reports, and, of course, equally usless.

In that paper I have shown that from the normal ratio of occurrence of certain complications, viz.: face presentations, breech and lower extremity presentations, superior extremities, prolapsus of funis, hemorrhage, including placenta prævia, etc., at a very low estimate, the fœtal mortality would exceed 1.7 per cent. of all labors—it probably would equal 2 per cent.—the total mortality for large a number being estimated at about 4 per cent.

In the discussion which took place, the general consensus of opinion seemed to be that the most frequent causes of still-birth were ergot and syphilis.

In a paper read last winter before the Detroit Gynecological Society, and published in Annals Gynecology, entitled: "Vaso-Renal Changes as a Factor in Causation of Still-Births," I have attempted to show how easy it might be in this matter, as in others, to jump to wrong conclusions and make assumptions from the common fallacious *post hoc*, *propter hoc* mode of reasoning; how ergot may be and unquestionably has been wrongly charged with fœtal destruction; how cases of still-birth may occur, in which had ergot been given to the parturient the death of the child would in all confidence have been laid to that cause. It would be an easy matter in a case of comparatively easy and speedy labor, the child undoubtedly living at the beginning, and up to a late stage of labor, and yet to the doctor's surprise and chagrin, born dead, if ergot has been given, to charge the accident up to that agent without a sufficient inquiry into all the circumstances of the case, or when some very dangerous complications to the child have escaped notice. Not to mention accidents of rarer occurrence, we may mention some of those likely to be met with by any practitioner, and very easily overlooked, such as premature separation of placenta; strangulation by reason of a cord too short, and tense by circumvolutions about the child's neck, a knot in umbilical cord drawn tense in the descent of the child; too long-continued pressure on child's head between perinæal muscles and pubic arch in second stage. If ergot has been administered in such cases, it will very likely come in for the blame, when the child would perhaps have been lost in any event. This danger may, perhaps, be better illustrated by exemplary cases in practice:

Mrs. G., was confined about the last of October, her 11th labor—all previous labors without accident or complication. I was called at 2 A. M., labor having been going on regularly for several hours, and it so continued for another hour when first stage was completed and head of child was presenting at outlet, apparently needing only another pain or two to expel the child, and which was confidently expected to occur. But at this stage the pains ceased abruptly. The forceps could easily have been applied without changing position of the

mother, and would have been good and safe practice for mother and child, but she and the friends having been assured before this cessation that only a pain or two more was all that was needed to expel the child, and she having been delivered safely of 10 living children, it was useless to urge that proceeding.

Having waited some time for the return of the pains I determined to arouse the uterus from its inertia by a ergot, which was given in a small dose. But within five minutes, (before the ergot could have had any effect), a strong contraction took place and the child was expelled asphyxiated, and was resuscitated only after considerable delay, effort and apprehension. The asphyxia I believe to have been due to the continuous muscular contraction of abdominal and perineal muscles upon the head wedged between sacrum and pubis. Again, another example:

Mrs. O. was confined in her fifth labor on the morning of Nov. 1. Labor was speedy. Child small but lively and healthy, though coming several weeks before expected time. Examination of funis after delivery of placenta, which I am in the habit of making to note any peculiarities, discovered a knot less than six inches from placenta.

This is regarded as a rare accident, though probably of much more frequent occurrence than of observation, as it is so easy and common to deliver the placenta and throw it, cord and all, into a vessel without examination, unless some gross abnormal peculiarity or some accident to the child has cast suspicion upon it. I have met with three examples in the last 260 cases of labor, the last two being in the last hundred cases of labor. The children have all been born living and healthy, and I suppose this is usually the case, as the knot could only be made in long cords. Yet it is conceivable that it might occur in a case with a cord sufficiently long to permit of the evolutions necessary for its formation, and yet of such relative brevity as to put a strain of such tenseness upon it as to interfere with the circulation, in the child's descent, especially if there should be delay with the shoulders. If in such a case ergot had been given, and this accident remained undiscovered, as doubtless many a one has, ergot would have been held responsible.

The history of this case is also suggestive. Mrs. O. in carrying this child was strongly threatened with abortion at third and fourth months, with hemorrhage and uterine pains. Was this the result of partial separation of placenta by reason of the evolutions of the embryo at this period, causing the formation of the knot? If so, was there not relative shortness? And might not this relative shortness, without an easy and speedy delivery, have caused premature separation of placenta, and with some delay in second stage, loss of child? The placenta was found loose and presenting at os uteri. The placenta, as well as child, was small. Had this probable partial separation of placenta any connection with its arrested development? Had this arrested development any relation to premature birth of child, somewhere from four to six weeks in advance of expectation? The premature birth would, of course, account for small size of child.

It is not as the apologist or advocate of ergot that I have selected this subject for a paper, but for the purpose of determining, as far as possible, the value of this agent in parturition, and the possible dangers from its use. An important point has seemed to me, to first rid ourselves of any fallacies of belief in holding the medicine responsible for what it is not chargeable with. I have had often to modify and change my views in regard to facts previously accepted as truths, and expect so long as I am capable of learning new scientific truths to have also, so to speak, to unlearn much that has heretofore been held as truth.

It may be impossible to arrive at very definite knowledge of the amount of fœtal mortality, due to ergot for the reason that the obstetric branch of the medical art is so largely in the hands of women, mostly ignorant and incompetent; so that not only is the amount of fœtal mortality impossible to be known, and much less is that chargeable to the management or mismanagement of the attendant.

Still we may arrive at an opinion as to its safety or danger in intelligent hands, if we have facts and figures from which to estimate.

Which of you gentlemen has ever had the mortification of the loss of an infant from this cause? Not many, I believe. And yet that it is capable of destroying and is responsible for a certain amount of infant mortality and of other injurious effects even, in most skilled hands, we have the best authority for believing; it is not only a common belief among the profession, but statements of best authorities are to that effect. Says CHURCHILL: "And although in by far the majority of cases no injury is produced by it, yet in five or six cases I have witnessed cerebral disturbance in different degrees, from a severe headache up to delirium, coma and insensibility, follow its use. By others it is said to disorder the stomach, and if given in large doses, to cause gangrene; but such cases must be very rare. I think I have seen retention of the placenta from irregular uterine contraction after the birth of the child, fairly attributable to it." This is the evidence of one of very extensive experience, and contains all the positive charges he himself brings against it, and that meagre as it is, all relates to its effects upon the mother. He goes on to say, however: "By GIRARDIN, BURNS, MOREAU and others, the child is stated to be more frequently still-born after the use of ergot, either

from some poisonous influence indirectly exerted upon it, or by the greater pressure of the uterus upon the *cord* (italics my own). I have seen some cases confirmatory of this statement, and of the latter mode of explanation as the uterine action was almost incessant." And again, that "DR. BEATTY has published a very interesting paper, showing that in certain cases the ergot does exert a *poisonous* effect upon the fœtus, and he concludes that the child is not safe unless the labor be concluded within two hours from the administration of ergot. More recent observations seem to confirm this view."

He gives the following rules regarding its use, which contain substantially that which governs all but the ignorant in the use of the medicine, and which, if carried out, it is needless to say that, unless in exceptional cases, the child will be born under the limit of the two hours from its administration, and thus not exposed to the dangers which, as DR. BEATTY has stated, only impends outside that limit, whether that danger be from its poisonous effects upon the child, as believed by DR. BEATTY, from pressure upon the cord, as believed by DR. CHURCHILL, or by pressure upon the head, as I confess, seems to me the more probable cause of the danger. The rules are, that ergot of rye may be tried:

1. When the pains are feeble and insufficient, without especial cause.

2. If the os uteri be soft and dilatable.

3. If there be no obstacle to a natural delivery.

4. If the head or breech present, and be sufficiently advanced. And

5. If there be no threatening head symptoms, nor excessive general irritability.

It is superfluous, perhaps, to say that in the use of the medicine, in the cases which I shall make use of, I have endeavored to act in conformity to these rules.

In the paper to which I have referred, "Still-birth, Ratio and Causes," I have cited a list of 75 still-births with the assumed cause, or at least each under the head of the complication, sufficient to account for the death of the infant. I shall here cite the table from that paper for the purpose of making future use of it, viz., to ascertain from the records of the cases, in how many and in which of them ergot was given, and to estimate any possible effect from it.

Putrid fœtuses (uræmia, syphilis, injury, etc.)	11 or 14.66	per cent.
Children of mothers habitually giving birth to dead fœtuses	5 " 6.69	"
Transverse presentations	14 " 18.66	"
Breech presentations	7 " 9.34	"
Inferior extremities	0 " 0.00	"
Face presentations	3 " 4.00	"
Twins not otherwise classified	3 " 4.00	"
Prolapsus funis	7 " 9.33	"
Placenta prævia	7 " 9.34	"
Craniotomies	3 " 4.00	"
Puerperal eclampsia	5 or 6.67	per cent.
Strangulated by funis	2 " 2.66	"
Premature separation of placenta	3 " 4.00	"
Unclassified	5 " 6.67	"
Total	75 " 100.00	"

The five unclassified may properly be charged to prolonged delay in sending for, and late assistance rendered in difficult labors under care of incompetent attendants, as midwives.

I find in the recorded histories of these cases but eight instances of administering of ergot, viz., among the 11 cases of putrid fœtuses, their death, of course, antedating labor, for some days at least, two of the parturients were given ergot. In the 7 cases of breech presentations it was twice given. In two of 7 cases of placenta prævia. In one of 7 cases of prolapse of funis, and in one of 3 face presentations. This case was finally delivered by forceps, as were 14 of the whole number, among which so delivered were two cases of face presentations, two of forceps to after-coming head, one of prolapse of funis, which was known on arrival to have been dead for some time. Many others of the cases were ascertained to be dead on my arrival. These facts cannot by any possibility be made to indicate any considerable infant mortality among these 75 still-births from ergot or even after it.

Per contra, my record notes in addition to above, 136 cases of use of ergot in labor, among which is recorded the following observations:

One child died on the third day of trismus, an accident probably in no way connected with the use of ergot in the labor. It was the only case of the kind in the 136 labors; the child was apparently well up to the third day, and the accident is by no means very rare in sone localities and seasons. Still as this accident has somewhere been mentioned as a sequence of ergot in labor, it is well to notice it; at the same time I will say that I have known of more cases of convulsions in new-born children after butter and sugar and such nasty mixtures dosed to them by ignorant women, than after ergot and dystocia combined.

Four cases of asphyxia of infant with difficult retarded resuscitation, in one of which it is distinctly noted as due to premature separation of the placenta by reason of a short funis; and in another a retarded second stage made the application of the forceps necessary to save the child.

In one case there was hour-glass contraction of uterus, making delivery of the placenta difficult; and in another, tetanic contraction of the os uteri creating the same difficulty, but in both of which the difficulty was overcome by the hand alone without detriment to the mother.

These were all the accidents which could be charged to the ergot. But there were the following complications of labor among these

cases, delaying the delivery and thus further jeopardizing the child by the opportunity thus given for the ergot to get in its perfect work. I n 211 cases after ergot given in the second stage had failed to accomplish delivery, the forceps were applied and delivery accomplished, and among these cases were one footling presentation with forceps to after-coming head. Three breech presentations, delivery natural, but delayed; one face presentation, delivery natural; three cases of twin births.

There were also 26 of these cases primiparæ though the weight of authority is against its use in such cases without urgent indications.

If these facts point to any conclusion at all, the inference is not by any means that ergot is a safe remedy to be used indiscriminately and without proper selection of cases, conditions and precautions, but that it is a remedy which may be used with safety and advantage, and that it has in all probability been held responsible for fœtal mortality and other accidents due to other causes undetected; a fallacy like many others due to the *post hoc, propter hoc* mode of reasoning and perpetuated by credulous acceptance of the dicta of authority; and that the same argument which would discard this remedy in its proper place would discard much of our most useful and reliable and effective materia medica. And, in fine, that the argument is not against the medicine but against its improper use, and therefore against incompetency and inefficiency.

I confess that in some of these cases, as when the os was fully dilated, the head presenting at os externum, with distended perineum, and with an abrupt termination of the *vis a tergo* by a sudden cessation of pains, and a complete uterine inertia supervening, in my judgment, the application of the forceps would have been the better practice, or this perhaps preceded by a full dose of ergot to insure post partum uterine contraction. But the physician can not always govern the whims and will of the patient and friends. If the physician proposes the forceps as the best thing under the circumstances for the mother and child, he is most likely confronted with the question suggested by fear, anxiety and apprehensions raised by the very suggestion, "Why! doctor, can't she get along without them?" And if he calmly and candidly replies, "Oh, yes, but they will immediately relieve the mother of her suffering and insure the safety of the infant"; the answer will be, "Oh, well, if she can get through without them, we will not have them used."

There is, too, a possible inconvenience of considerable weight connected with the use of ergot in patients with this morbid dread of instrumental delivery, in case the ergot reviving contractions still fails to accomplish delivery, then the use of the forceps may become urgently necessary for the safety of the child or for some condition connected with the mother.

But, on the other hand, after the failure of medicines to accomplish the delivery, the patient and friends will be much readier to submit to the use of the instruments, especially in the pains of almost completed delivery.

FLUID EXTRACT CASCARA SAGRADA (FORMULA '87).

BY J. E. TAYLOR, M. D., RICHMOND, IND.

I have been using fluid extract cascara sagrada, ℞ '87, for a few months, and I wish to say that I have never found a remedy that has given me such universal satisfaction. Its great palatableness is one of its best features. It has none of the bitterness of the old fluid extract. Even babies take it without a murmur, when simple syrup is the vehicle.

I have never had an adverse report from it. As for myself, I am confident it has the usual tonic-curative action of cascara sagrada, in addition to its laxative property, as is true of the other forms of preparation, or the results I have observed would not have been so uniformly satisfactory. With a view of eliciting the experience of others, however, I will give below an account of seven cases of constipation treated with this preparation, for while it may be quickly decided that it has the same laxative properties of the old preparation, it may take many series of careful clinical tests to determine that it exerts the same tonic influence so plainly attributale to the older form:

Case 1.—Mrs. H., had been suffering from organic heart disease for several years; and she had also been a victim of constipation for twenty years. She had used almost everything in the way of laxatives, without relief. I prescribed two ounces of fluid extract cascara sagrada, ℞ '87, directing her to take thirty minims after meals. On the third day she reduced the dose to twenty minims, and on the sixth day to fifteen minims. She followed this dosage until the tenth day, when she made a further reduction to ten minims, her bowels moving once or twice daily. She stated that she had never found any medicine that had given her such relief. The patient has taken in all four ounces, and for the past two weeks has not required treatment. She is very much delighted.

Case 2.—Mrs. F—, has been afflicted with constipation of a severe form for eight years. I gave her a two-ounce vial of the preparation, with instructions to take thirty minims after each meal, directing her to diminish the quantity taken as her condition seemed to indicate. Within three days she found it necessary to reduce the dose to 15 minims. Continuing this dose for a week or longer, she then took ten-minim

doses twice a day, and finally but once daily, her bowels acting normally. Some time afterwards she returned and obtained another supply, saying it was the only remedy she had ever used that would serve her purpose satisfactorily. Two ounces of the preparation was all that was necessary to elicit such praise.

Case 3.—MR. G—, had dyspepsia and chronic constipation. He had resorted to almost everything recommended by medical men without being able to obtain relief. After taking fifteen minims of the fluid extract cascara sagrada (℞ '87) twice daily for two weeks, he found it was necessary to take this quantity (15 minims) but once a day. He returned once for more medicine to be used as required, saying it was the only remedy he had ever taken that was satisfactory and permanent. It is five weeks since he received the last prescription, and he reports that he does not need more.

Case 4.—A babe of 14 months. It was a bottle-fed infant, and had suffered from constipation from its birth. Resort had been had to soap suppositories, then to injections, and finally to one-half teaspoonful doses of fluid extract cascara sagrada, old formula, to get an effect. I placed the child on 5 gtt. doses of fluid extract cascara sagrada, (℞ '87), to be given three times daily. In four days it required but one dose per day; and in twenty days the medicine was discontinued. It has been nearly three months since the beginning of the treatment, and the bowels are still active. But one prescription of two ounces was required.

Case 5.—Mrs, D., was suffering from hemorrhoids quite severely. Like the others she had tried almost every known remedy, without success. She had finally resorted to enemas to secure a proper action of the bowels, which management she had found necessary for the last five years. I prescribed thirty-minim doses after each meal. After the 6th day she reduced the dose to 20 gtt., and later to ten drops with the result of having her bowels move freely once a day. She is very much delighted, and would not be without the remedy for any consideration.

Case 6.—Mrs. L., constipation for seven years; as usual had proved every other remedy a failure, for all would soon lose their effect, when she would seek another. I put her on this formula and had no report for ten or tweve days; similar dosage as in the other cases. After the second day her bowels responded daily. In five days time she had to lessen the dose. At the time she reported (the 11th day) she was taking twelve drops twice a day. Four ounces of the preparation were necessary. Have had no report in three weeks, hence I infer that everything is satisfactory.

Case 7.—Mrs. P., sedentary habits; had been suffering for the past ten years from constipation. Had used various preparation but never got permanent relief. She began with fifteen drop doses, thrice daily. After two weeks, use of this preparation she reduced the frequency to one dose daily, which was sufficient. It required two ounces only. It has been seven weeks since the prescription was given.

AN UNIQUE CASE OF RUPTURE OF UTERUS.

BY H. C. OWEN, A. M., M. D., BALDWIN, KANSAS.

Having just read, in the MEDICAL AGE, the case of rupture of the uterus reported by DR. HENDERSON, of Detroit, Mich., I am induced to report the following very unique case:

Nov. 21st, at 1 P. M., I was called to see MRS. B—, aged about 38 years; mother of five children—one pair of twins. She was a stout-built, robust, colored woman.

She reported that her confinements had all been tedious, lasting from 24 to 48 hours. I found her having light, irregular pains, coming on at long intervals. Digital examination revealed an undilated os, with uterine tissue soft and everything in normal condition.

I visited a patient half a mile in the country, and called on my return. Found pains lighter, with no indications of labor coming on soon; told them to notify me when labor came on.

At 2 A. M. on the 22d, her husband called at my office and reported pains about as on the day previous, saying she was unable to sleep much. I prescribed morph. sulph. ½ grain hourly until relieved; ordering him at the same time to notify me if pains should become severe. The second dose sufficed to relieved the pain, and she slept for three hours during the morning. I called at 8 A. M., found her quiet, with no pain. Had taken breakfast of tea and crackers, which was relished.

I called again at 2 P. M. the 22d, and found her quiet, with no pain. She had taken dinner of coffee and crackers. No indications of labor. Told her she might be confined in a day or a week, or, possibly, she might go for a month. Told them to send for me when my services were needed.

The family retired at 9 or 10 P. M. The husband says he was up twice during the night. He awoke between 4 and 5 A. M. on the morning of the 23d and found her dead.

Post-mortem.—Found rent in anterior portion of uterus, about 8 inches long, through which the rump and one hand of the fœtus had passed into the peritoneal cavity.

In the peritoneal cavity was found a large amount of blood with *liquor amnii*. Evidently, there were no pains after the uterus ruptured, or it would have drawn itself down entirely from over the fœtus, leaving it free in the abdominal cavity, since the rent was sufficiently large for the fœtus to pass through, and the con-

traction of the longitudinal fibres of the uterus would necessarily have shortened the organ; thus it would have relieved itself of its contents in a short time.

Did rupture occur with first pain? It is impossible to tell; yet the probability is that she had quite a number of pains and refrained from awaking her husband until she could be sure it was necessary.

Why did she not cry out and give the alarm when the rupture took place? The probability is that the shock from rupture of uterus and immediate hemorrhage attending the accident, was so profound that she became, at once, unconscious, and died without a struggle.

The case reported by DR. HENDERSON, in the MEDICAL AGE for Nov. 26, is peculiar in that pains returned after rupture of the uterus occurred.

It is quite probable that the rent at first was not extensive, and that the shock was sufficient to cause a cessation of labor pains, and that after free stimulation the uterus regained sufficient tone to contract with enough force to enlarge the rent, making it large enough for the fœtus to pass through, and then contraction alone would be sufficient to relieve the grasp of the uterus on its contents.

What is the duty of the attending physician in such cases? Manifestly to operate as soon as a clear diagnosis can be made and the patient rallied somewhat.

But just at this juncture a short time spent in preparing for an operation compromises the life of the child, whose means of support have already been cut off.

At the same time the chances of the mother's life are almost nil.

Unfortunately, most operations in such cases are performed at the autopsy.

Correspondence.

THE LUXURY OF PROFESSIONAL LYING.

Perhaps there is no man or set of men who have the temptation to lie put before them as doctors have. They are absolutely urged to lie on certain occasions and compelled to on others, and they should be equal to the emergency. Again, a doctor is morally bound to lie under certain circumstances. It is his duty, and wherein he fails in that respect he fails to do justice to his patient. In my own experience I verily believe that I have saved many a life and prolonged many others, by what I believed at the time was a good wholesome lie.

In the practice of medicine lying gets to be a luxury. You dote on it. You practice outside so as to perfect yourself, so to speak. You linger lispingly on the words which must and will convey a meaning other than the truth to your patient. Talk about dealing in unvarnished truth with your patients. Why, it is preposterous. They won't stay by you. They will go to a man who tells them a better story. Take consumptives, for instance, and you tell them that they have incipient tuberculosis and they will travel from Dan to Bersheeba to find a doctor who will tell them that it is nothing but "liver complaint"—whatever that may imply. Yes, sir; and they will pay him their money and come home to die on your hands gratis.

Thirty years of active practice has satisfied me—although I started out to be truthful with my patients—that it is not, so to speak, the proper caper, if you want to retain your practice. You must hide the truth in metaphor or straddle it in medical jargon, but some how or other you must avoid telling the truth. Why, I have known instance after instance where the patient has solemnly assured me that the solid truth was the material they were after, and that they were able to stand it. I say I have known them, as a rule, after this to go right off into disquietude and quackery.

Right here comes the luxury of lying. Now, when I speak of lying, I don't mean one of those pestiferous, measly lies that crawl about and do mischief, but a lie grand in its conception, magnificent in its proportion, and colossal in its appointment—a lie of sufficient strength to overcome truth and, for the time being, make you master of the situation.

Of course it requires some gall to look a patient square in the eye and tell him what you know to be a point-blank lie, but so long as it is for his interest as well as your own, it is a necessity, aye! a luxury.

In this way one avoids all the little unpleasantness which hovers around a doubtful or dangerous diagnosis or prognosis, and you are let off with a slap on the shoulder and a fat fee, which salves your conscience and makes you and the patient feel altogether better.

It has taken me all these years of practice, besides a mint of money, to find out how it is myself, and I don't propose to have the rising generation of doctors to come up thinking that they have to be archangels in order to practice medicine successfully. No! What you need is an education, then the necessary amount of gall, and the capability of rolling a lie around your tongue until it comes out sweeter than the truth. Then will your patients stay by you; then will the fees come to you, and children's children will rise up and call you an old blister, allee samee!

E. B. WARD, M. D.

LAINGSBURG, Dec. 17th, 1888.

TWO CASES OF BELL'S PARALYSIS.

During the last two years we have had two cases of this interesting disease, and as it has been rather uncommon in our practice and a

theme seldom discussed in the medical journals, we will give the MEDICAL AGE'S readers our experience with it. It generally makes itself manifest gradually; such symptoms as a smooth, motionless forehead, corner of mouth drawn to one side, making it very difficult to close the paralyzed side, the eye of paralyzed side refuses to close, and other strikingly characteristic symptoms are seen, affecting all the muscles supplied by the seventh nerve on the side paralyzed. It may be caused within the skull by blood extravasations, tumors, and inflammatory products, which give rise to pressure, or from disease of internal and middle-ear, but most generally it is due to the effect of a draught of cold air on the side of the face, especially while at sleep. The most interesting part, perhaps, is the treatment. We have used the following therapeutic measures with success: We first try the Faradic current, and, if we get contractions of the muscles by placing the positive pole over the mastoid process and the negative at some indifferent spot on the paralyzed side, we consider it curable, and proceed to use the galvanic battery, from 4 to 6 or 8 zinc carbon cells. Sometimes alternate with the Faradic. Use electricity about 4 times a week, each seance lasting from 20 to 30 minutes. Keep this up until there are signs of the paralyzed muscles regaining their functions, all the time giving elixir quinine, iron and strychnine in teaspoonful doses three times a day, and keep the bowels regular by some laxative, most usually this:

℞ Ext. colcynth co., gr. xxx.
Ext. nux vomica, gr. xx.
Ext. belladonna, gr. vij.
M. Ft. pills No. 30, in capsules. Sig.—One every other night.

Under this treatment, all our cases have made a good recovery in from four to six weeks.

JOS. Z. SCOTT, M. D.,
FRANK M. SCOTT, M. D.

SCANDIA, KANSAS.

MATERNAL IMPRESSIONS.

Will you allow me a word on "Maternal Impressions?" Wiser heads than mine have decided that the impressions of the mother can have no effect in forming the offspring. Let me state a few facts: A mother lost a child, and for several months she was almost constantly weeping. A son was born apparently healthy, and for the first year of his life, cried nearly all the time. Query, did the state of the mother's mind have anything to do with the crying of the babe?

Some years ago I was sent for to attend Mrs. I. The child was born before I arrived and only lived a few minutes. It was given to me and I kept it for some time. Its nose, eyes and mouth were like those of a hound puppy. Its legs were bent forward like a dog's hind legs. Its arms were extended like a dog's fore-legs. On the side of the hands were claws like a dogs, even to the nail of the claw. The mother did not see the child, so knew nothing of its deformity. I do not know the cause of the deformity, but I do know that about the time of conception, the husband brought home a hound puppy, and the mother took a great antipathy to it, and it tormented her through the whole period.

Another mother, in the early months of pregnancy, had an intense "longing" for new cider which was being made near by, but she did not get it. When the child was born, one hip and a part of the back were the color of new cider. I could state a number more of facts like the above.

A mother of five children, was frequently asked why her children were so good and never fretted. She replied that it was the fault of the mother when a healthy babe was cross; that during pregnancy she never allowed herself to fret or worry.

It may be that the mother's mind has no effect upon either the mind or body of the child; I do not know.

A. FORD, M. D.

ALTON, MICH.

PREVENTION OF CONCEPTION.

A word on the much-written-about "prevention." I am quite an old man and have tried to live with my eyes and ears open. I have seen many families where it would have been a blessing to both children and the world if they had never been born. I believe in *fewer* and *better* children. If the "prevention" could only take place where it should. There are those to whom children are born, who are unfit to propagate the race, either physically, mentally, or morally. Any kind of "prevention" with such would benefit the world.

The poor who can not half take care of their children, are the most prolific, and prevention would be a good thing for them.

The "prevention" that I believe in is not to give an opportunity for conception.

I can say with DR. JOHNS, that when I was married I not only expected, but *wanted* children, but when we had all we could do justice by, we called a halt, and without using any of the devices of the brothel either.

I think that there is a vast amount of mischief done by preventing the ovum from coming to maturity. This I would condemn in every instance.

AN OLD DOCTOR.

The Medical Age.

A SEMI-MONTHLY REVIEW OF MEDICINE.

JOHN J. MULHERON, M. D., Editor.

—Published By—

GEO. S. DAVIS, Medical Publisher, Box 470.

DETROIT, MICH., DEC. 26, 1888

Notes.

The season will soon be at hand which calls forth the crop of good resolutions, the large proportion of which, alas, too soon succumb to the trials which beset them. Few of them survive the diseases to which their infancy is peculiarly prone, and the epitaph, "What was I begun for, since I'm so soon done for?" is the most fitting that could be devised. Some one, we believe, has said, or ought to have said, that New Year's resolutions are a sign of weakness on the part of the maker, and that the man who is weak enough to make them is always too weak to keep them. This sage reflection may possibly have some slight germ of truth in it. The weakness, however, is probably rather one of judgment—the individual resolving to do what he is not built for accomplishing. The man who resolves to be absolutely good overestimates his capacity. We would not ask of our readers any very remarkable feats during the coming year, but would respectfully request that when they are making up their bundles of such resolutions as they may determine to keep, they put in one to the effect that they will report some of the interesting cases which we hope they will be called to treat, and that they will not let the year get very old before they renew their subscriptions. This is not so very much to ask, but the request granted will work a surprising amount of both subjective and objective good. Try it.

The annual report on the vital statistics of France recently issued shows an alarming condition of affairs in that country. The decrease in the number of births keeps up, at the rate of over 12,000 per annum. Of the births registered during the year 73,854 were illegitimate—over 8 per cent. of the whole. In the department of the Seine, 25 per cent. of the births were iliegitimate. As to the fecundity of married couples the report shows an average of only 16 births to 100 women. The proportion of boys to girls in the births is 105 : 100, but this advantage is lost in the death-rate, 107 men dying to 100 women. The average mortality for 1887 was 22 per 1000.

The comparative smallness of the amount of editorial matter in the closing number of the volume, in the case of the medical journals, is something more than a mere coincidence. It finds its most satisfactory explanation in the appearance of the index. Most of the editors, however, find room to compliment themselves and to congratulate their readers on the excellence of their journals during the past year, and to indulge in promises for the future. Our retrospective and horoscopic apparatus is out of gear, and it must suffice for us to say that in the future, as in the past, we shall endeavor to keep up with the procession.

The conflict between the German and the English doctors is not confined to the attendants on the late Emperor. A German visited Lawson Tait and worried the touchy gynecologist during one of his operations, with irrelevant questions. He finally asked the secret of his (Tait's) success. The reply: "My success is due to the fact that, like all Englishmen, I keep clean finger-nails." The condition of the questioner's nails gave the answer its peculiar sting. Lawson Tait, for some reason, is not very popular in Germany, and in return he thinks the time spent in understanding the German tongue, is time wasted.

The New Orleans Picayune says that the young doctor, with a reputation to make, always feels grateful when his patients get well, but that with the old and well-established physician the case is different. If his man dies he simply says, "Everybody must die," and the clergyman of his church comes to the funeral and stands in with him, saying, "The Lord giveth and the Lord taketh away," and there you are. This collusion between the professions is not as suspicious as it may appear. The dead man is equally unprofitable to both.

The question which for some months has been breaking the public all up: "Is Marriage a Failure?" has now been given a companion in one propounded by the Medical Record: "Is the Practice of Medicine a Failure?" We have already endured much, and shall philosophically look this new trial in the face. We hope, however, that the correspondent will temper his effort at the solution of this new problem, with mercy, and will make it short.

A correspondent sends us a too lengthy communication on the subject of the prevention of conception. The gist of it is that he is like the New York aldermen who advocated the purchase of a male and female gondola for the lake in Central Park, in that he believes in letting nature take its course.

Dr. Free, in the Medical and Surgical Reporter, says that the cry of the patriarch's wife

was: "Give me children or I perish." The modern American wife has amended the cry so as to make it read: "Give me no children lest I perish."

DR. GROSS avers that in one case out of six, sterility is due to defects on the part of the husband.

Book Notices.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS, CONSISTING OF Original Treatises and of Complete Reproductions, in English, of Books and Monographs selected from the latest Literature of foreign countries, with all illustrations, etc. Volume I, Number 1. Contents: The Pedigree of Disease, by Jonathan Hutchinson, F. R. S. Common Diseases of the Skin, by Robert M. Simon, M. D. Varieties and Treatment of Bronchitis, by Dr. Ferrand.
New York: William Wood & Co.

It is a year since MESSRS. WM. WOOD & CO., suspended the publication of their Library of Standard Medical Authors, which they had issued for six years, and the present venture is intended to take its place, although the price is somewhat lower. The cheapness at which the "Library" was furnished was a marvel, and the profession will be pleased to learn that works of equal scientific and literary merit are now to be furnished in monthly numbers for ten dollars a year. In the number before us the names of the contributors are a sufficient guarantee of the excellence of their productions. JONATHAN HUTCHINSON'S writings are always interesting and what he has to say under the unique title "The Pedigree of Disease," is peculiarly so. The monograph is the reproduction of six lectures on Temperament, Idiosyncrasy and Diathesis, delivered in the theatre of the Royal College of Surgeons in the session of 1881. The subjects may not be practical in the accepted sense of the term, but the papers come under the head of the collateral reading which is indispensable to the progressive physician. If the enterprizing publishers continue to give articles of the high order of merit which characterizes those embraced in the first number of the "Monographs" they will merit liberal professional support.

LECTURES ON ECTOPIC PREGNANCY AND PELVIC HÆMATOCELE.—By Lawson Tait, F. R. C. S., Edin and Eng., LL. D., M. D. (Honoris Causæ) of the University of New York, Union University of Albany and the College of Physicians and Surgeons of St. Louis; Professor Gynæcology in Queen's College Birmingham; Surgeon to the Birmingham and Midland Hospital for Women, etc.
Birmingham, England: The "Journal" Printing Works, New Street.

DR. LAWSON TAIT is one of the most pronounced individualities in contemporary medicine. Through force of his rugged personality, bold originality and broad learning, he has made for himself a lasting place in the history of modern gynecology. His treatment of his contemporaries has, however, not been such as to win for him the personal following which should attach to a man of his calibre. This is unfortunate in some respects, and in others fortunate. The antipathies which he has aroused cause his work and statements to be thoroughly and critically examined, and, as a result, the position which he has attained is solely the reward of merit.

By ectopic pregnancy the author, following DR. ROBERT BARNES, embraces all pregnancies occurring outside of the normal place for gestation. It is needless to say that he discusses his subject with unsurpassed fullness and clearness, and that those seeking information on this grave complication can find it nowhere in a more available form than the brochure before us.

A MANUAL OF DIETETICS FOR PHYSICIANS, MOTHERS AND Nurses. By W. B. Pritchard, M. D. New York City. Price 50 cents. New York: The Dietetic Publishing Co., 115 Fulton St.

The author gives as a reason for the preparation of this manual, the fact that of the 800,000 deaths, in round numbers, occurring annually in this country over 500,000 are among children under five years of age and that two-thirds of these are due directly and indirectly, to improper feeding. The little book is adapted to the public as well as to professional requirements, and it certainly is a model of conciseness and perspicacity. If it would seem to give special prominence to the value of the peptonized foods the fact is quite justified by the value of these in conditions in which the digestive apparatus is impaired as to its functions. In proportion to the value of the dietetic treatment of disease will the importance of this manual be apparent. The various diseases are discussed separately and the dietetic management of each appropriately discussed. It is really a valuable little book.

PICTORIAL HISTORY OF ANCIENT PHARMACY, with Sketches of Early Medical Practice. By HERMANN PETERS. Translated from the German and Revised, with Numerous Additions, by DR. WILLIAM NETTER.
Chicogo; G. P. Engelhard & Co.

This volume contains evidences of great industry in the line of research, and must prove of much profit to those whe are interested in the history of medicine and its hand-maid, pharmacy. Is it possible that the efforts of the present day will appear as crude a thousand years hence, as those of a thousand years ago are to us?

The publishers have issued the work in becoming style, and should find for it a large sale, especially among pharmacists.

Medical Progress.

THE PRACTICAL TREATMENT OF SEASICKNESS.—There is, perhaps, no other disease in the category of human ills which has enlisted the utmost energy of specific medication like seasickness. Every school of medicine has tried its hand, but, in the presence of an angry sea and of a susceptible temperament, that hand has fallen in abject helplessness. This distressing malady is as hydra-headed in its manifestations as chronic eczema, and like that trouble has defied the resources of three materiæ medicæ. Homœopathy dealt the monster a death-blow, with its low potencies of petroleum and of apomorphine; hydropathy came confidently to the rescue of the hapless victim of naupathia, with its compresses of cold water and copious draughts of the same element taken hot; while regular medicine, repeatedly baffled, has pursued the study of this inexorable disease from a scientific standpoint, and, from the demonstration of a more or less correct etiology, has deduced a treatment which nourishes the germ of a true specific, whose action upon naupathia will be as characteristic as the effect of quinine on intermittent fever, or of the tincture of iron in erysipelas.

The first really effective contribution to the pathology of naupathia was made a few years since, when a French observer, noting a similarity in the objective symptoms of the two troubles, advanced the opinion that "Meniere's Disease," or aural vertigo, and naupathia had a common causation, viz.: a hyperemia or apoplexy of the semi-circular canals, characterized by vertigo, pallor and obstinate vomiting; and, from analogous reasoning, he named the nervous sedatives as theoretical specifics in the latter trouble. From a development of this idea sprang the judicious and highly beneficial treatment of naupathia by the "bromides;" and it is a matter of surprise under what a variety of names these remedies are now advertised. Every drug store has a "seasick" remedy, and in nine cases out of ten they are composed of a strong solution of the bromide of sodium or potassium, or of both, in camphor water; and the same formula, with slight variations, constitutes the great bulk of the regular prescriptions for the same purpose. The luckless victim of the naupathic predisposition, will apply himself diligently to his bottle for two or three days before sailing, under the serene promise of his medical adviser that the ounce of prevention will work wonders; and he may thank his lucky stars if his body is not covered with an inflammatory acne before he is three days at sea.

Acute bromidism seems to be easily and rapidly induced in a system whose tone is lowered by sickness, and unless one is on the *qui vive* for its appearance, the question of diagnosis, in a case of this kind, is not always so satisfactory as might be wished. A case of variola discreta makes its appearance, and a few days afterwards attention is drawn to a person who had been exposed to the previous case, and is complaining of headache, pain in the back, with some fever, which, however, subsides in about three days, just as a scattered papular eruption shows itself on the extremities and the upper part of the trnuk. Then, if you are away from any hope of a consultation, you will rub up your differential diagnosis vigorously and will derive but a poor and unsatisfactory consolation from a history of large doses of the bromides. Yet this experience, occurred twice to the writer in one trip, and both cases turned out to be simple acne, which subsided in a few days.

The bromide treatment, as a prophylactic, is to be extolled, for, in a large proportion of cases, it either totally prevents or greatly mitigates the severity of the symptoms. But at sea its usefulness is greatly abridged by its disgusting taste. Every digestive sense, if I may be pardoned the phrase, is in a state of abnormal excitability in naupathia; an offensive odor, a sweet, sour, acrid or bitter taste, will often undo the labor of days and arouse the tortured stomach to an invincible irritability. True, the drug may be administered by enema, and when combined with large doses of chloral, is often very serviceable. But the labor involved in such an operation, particularly in rough weather, when it would be most needed, practically precludes its use except in extreme cases.

Thus the bromide treatment was seriously handicapped, and thoughtful observers turned with unflagging courage to a still more rigid observation of the clinical features of the trouble, for the indication of remedies whose action at sea should be unattended with nausea. Slowly the opinion crystallized that naupathia was but the expression of a functional irritation of the nervous system, and that the symptoms of the trouble could be fairly explained on the theory of a suspension of the functions of the great sympathetic. Take, for example, the now well-recognized action of the sympathetic upon the non-striated muscular fibres, such as the intestinal coats, the iris, and the walls of the arteries, and we have in this theory a plausible explanation of the myosis, the constipation and the marked decrease in arterial tension which is so characteristic of seasickness. The sympathetic ganglia of the heart would play no unimportant part in this reduced blood-pressure, which, in its turn, by producing anemia of the medulla oblongata, would give the persistent nausea and vomiting. For the original cause of this paretic condition, may we not reasonably invoke the reflex action caused by excitation of the nerve endings in the abdominal organs on the contiguous semilunar ganglia and the great solar plexus? During the occurrence of these phenomena reflex action remains intact.

The nervous symptoms of naupathia bear a strong resemblance to concussion of the brain in its milder forms. Great prostration, physical and mental, co-exists with indisposition to the slightest exertion; while vertigo and intense frontal headache with insomnia are frequently present. The pulse is thready, and the number of the cardiac pulsations greatly reduced, while the skin is cold and covered with a clammy sweat. After prolonged emesis gastralgia of a peculiarly distressing character frequently supervenes, and then the usually apyretic character of the affection gives way to an exacerbation of fever, during which the temperature may astonish the attendant by jumping suddenly to 103° F.

The remedies indicated for the increase of arterial tension are three—atropine, strychnine and caffeine—and they are administered hypo-

dermatically for a number of reasons. The absorbing power of the stomach is completely in abeyance in naupathia and all classes of ingesta become mere irritants. But should partial absorption take place from the gastro-intestinal tract, the effect of these alkaloids is apt to be neutralized by the destructive action of the liver.

Having determined, then, on the subcutaneous method of administration, it is of the first importance to ascertain the peculiar characteristics of the attack; whether the symptom point to gastric or cerebral involvement, for these two principal forms of the malady very seldom co-exist, and with care their differentiation is easy. If there should be little or no emesis, but agonizing headache, with flushed face and a tendency to mental aberration, then the preference should be given to caffeine, and its administration is, in the great majority of cases, followed by the most salutary results. The equilibrium of the circulation is restored, the pain and distressing anxiety subside, and the exhausted patient falls into a light and tranquil slumber, and from which he awakes substantially relieved. But in the ordinary cases, where gastric irritability is the all-including symptom, the mixture of atropine and strychnine exemplifies its marvelous power. Let me illustrate:

A young and vigorous woman, who assured me that a sea voyage was the bane of her existence, as she was sick in all kinds of weather, received, just as the nausea began, a hypodermatic injection of atropine $\frac{1}{150}$ gr. and strychnine $\frac{1}{30}$ gr. I watched the case closely, for I was skeptical of the result in the presence of such a marked idiosyncrasy. The only noticeable effect was a disappearance of the nausea and a return to her normal condition when on land. This is the peculiarity of these drugs; they appear to act simply in restoring suspended function, leaving no deleterious effects behind, to be worked off in some other way. I was still unconvinced, for I was aware that the susceptibilities vary in the same subject, in naupathia to a remarkable degree, and that this apparent cure might, after all, be only a coincidence. But my doubts were destined to a speedy solution, for the next morning she was quite as badly afflicted as of yore, and the ship was plunging through a heavy sea, seriously threatening the stability of everything movable. But I was not discouraged, for I was already satisfied of the efficacy of the remedy in mild cases, and was desirous of giving it a thorough trial under the most adverse circumstances. I easily persuaded the patient to try again, and this time, as before, the administration was followed by almost immediate cessation of the nausea and vomiting, and within half an hour she was sleeping the light fitful slumber so characteristic of exhausted nerves when quiescent under narcotic action. It is another peculiarity of these drugs thus administered, that neither morphine nor cocaine are mere absolute nerve sedatives, and while the latter will rapidly vitiate the appetite, the former will so stimulate the digestive functions as frequently to induce an appetite in one who has taken them within an hour. Within twelve hours I administered another dose of the mixed solution as a precautionary measure, although I did not see any real need of it, but I dreaded to have the patient pass from under the effect of the drugs for at least forty-eight hours, and she cordially agreed with me. The next day she came to dinner for the first time in a long and varied experience on the ocean.

A middle-aged gentleman had been an object of commiseration to all on the ship for a week. He could retain nothing on his stomach, and the only endurable position was the dorsal decubitus on one of the deck benches, and there he would lie all day and far into the night, not having the courage to go below. He had long since obeyed the injunction to "throw physic to the dogs," and he made up his mind to suffer heroically. But a sharp gale of wind proved too much for his resolution, and after a night of retching he begged me to alleviate his misery. At bedtime the remedy was administered, and the next morning, at dawn, he was at my door, stating that he had passed a very comfortable night, and begged for another dose before the effect of the first had worn away. This was given him, and inside of twenty-four hours he was at his meals regularly and was soon one of the most active men on the ship.

It is needless to multiply examples. Suffice it to say that there are cases, particularly where organic disease, either of the respiratory organs of the heart exist, when any or all of these remedies are futile; but these are exceptions, and as such should not prejudice the rule. The *sine qua non* in the treatment of seasickness is to restore the assimilative powers of the stomach. Without this, nourishment is a mockery. It is the old sailor's remedy for the land-lubber, that he should keep a full stomach and swallow a liberal allowance of whisky or brandy. And even competent observers have laid great stress on the question of feeding, esteeming it to be the sheet-anchor in the treatment. But that aliment is hard to find which will tempt the absorbents of a rebellious stomach and the mere exercise of swallowing, with the dismal certainty of ejecting it in a few minutes, is not calculated recommend the "alimentary" cure of naupathia to the voyager. Among the beef extracts so much in vogue, all are more or less nauseating, with the exception of the "peptonized" extract of Parke, Davis & Co., which assimilates fairly well in many cases. The beef, iron and wine, put up by the same firm, is invaluable in the treatment of naupathia, as it contains the same peptonoids as the extract and is always grateful to the patient. This concentrated nourishment in palatable form will build up the patient rapidly, and by abstaining for a few days from bulky food he will soon regain his normal condition. Ice in small quantities is most grateful, but it should be allowed to dissolve in the mouth and the fluid expectorated. Bass' ale, taken cold and in small quantities, is in high repute and often answers an excellent purpose. Champagne, if dry, sometimes gives temporary benefit, but it is not reliable and is sure to be taken immoderately. A nickel-plated tap is a convenient adjunct to a champagne bottle, for by its use the liquor may be preserved, and the patient does not feel under obligations to finish the bottle at once to keep it from spoiling. And, above all, quiet, in an easy position, with an abundance of fresh air, is one of the elements of success in relieving seasickness. The imagination is not

idle in this trouble any more than it is in any other neurosis, and although I am not prepared to subscribe to the "mind cure" theory, yet the profound depression and nervous apprehensions which are apt to accompany bad cases, may be greatly mitigated by an intelligent sympathy with the sufferer.

In conclusion, the outline of treatment above designated is purely empirical. But what line of therapeutics ever sprang full-fledged into existence without having the experimenter for its sponsor? In the days of *a priori* reasoning, experimentation may be said to be conducted on a scientific basis, but it is not the less experimental. And this theory of the cause and treatment of naupathia, offers in its application and development one of the most promising fields of research remaining to the enterprising explorer:—N. S. Giberson, Surgeon S. S. "Mariposa," in the *Sacramento Medical Times*, December, 1888.

THE "OPEN-AIR" TREATMENT OF PHTHISIS.—Even skilled observers must experience some difficulty in deciding as to the merits of two rival schools in the treatment of pulmonary phthisis. On the one hand we are assured that the most important factor in the production of phthisis, after the hereditary lack of tissue vitality, is the breathing of respired air which contains certain volatile poisons allied to the ptomaines. With the believers in this principle, fresh air is the desideratum, and special stress is laid upon the necessity of obtaining an ample supply of air at night. Whether this factor have the supreme importance ascribed to it or not, it is obvious that as a general principle it is unattackable. One has but to go into the average bedroom in the early morning to be convinced of the fact that our night air, inside the house, is likely to prove highly detrimental to health in the long run. The remedy suggested is the open window, and it is on this point that variance of opinion arises between medical men. No one denies, in the abstract, that an ample supply of fresh air, at all seasons and at all hours of the day and night, is supremely desirable, and this more particularly in the case of patients prone to, or suffering from, incipient phthisis. Consumption is extremely rare among races whose habitations allow of the free circulation of air night and day, while sailors, on the other hand, though living under otherwise favorable conditions, suffer to a disproportional extent from the disease, a liability which is partially explained by the utter absence of ventilation in the forecastle, which reeks with the emanations of an overcrowded dormitory. Still, it is nevertheless a great step from advocating fresh air in abundance, to admitting it at all times without regard to the other factors which go to make up an air which may be considered admissible for a patient whose mucous membranes are easily disturbed. It is all very well for robust advocates of the "out-door" treatment to nail the window open even as Nelson nailed his colors to the mast, but it is doubtful whether the admission of air, which is both cold and damp, would not cause at least as much harm in one direction as a confined air does in another. The out-door treatment properly and thoroughly carried out may be all that is claimed for it, though that is saying a great deal, but in cities this cannot be done, and half measures are proverbially dangerous. A suitable temperature is eminently called for in a bedroom, since it is there that persons, after leaving a warm atmosphere downstairs, proceed to expose themselves to the double discomfort of cold air and cold sheets. In this climate, at any rate, it is absolutely impossible to provide an adequate supply of fresh air in the winter without positive discomfort and danger to health, except somewhat elaborate and therefore costly appliances be provided to warm the incoming current of air.

Cold and damp combined are notoriously conducive to many of the evils that flesh is heir to; night air is usually cold, and more or less heavily charged with humidity, and has, therefore, with some show of justice, been credited with directly injurious effects in the production of phthisis. In fact, dampness and variability of temperature are as potent in the causation of pulmonary troubles as are the opposite conditions of dryness and uniformity of temperature in its prevention. It is necessary, therfore, to use some discrimination in counselling the free admission of air by the window for delicate patients. This can only be approved, during the inclement seasons of a climate such as our own, on condition of the collateral requirements as to heat and moisture being satisfied.

Failing the necessary apparatus for providing a theoretically perfect supply of air at a suitable temperature, it is alway possible to attenuate the undoubtedly injurious effects of a hermetically sealed bedroom by allowing the maximum amount of ventilation compatible with comfort. When once the habit has been started, it is wonderful how much can be borne. Short of actual exposure, nothing is better calculated to minimize a tendency to catarrh than breathing pure, cool air. In the matter of temperature the great object to be aimed at, after all, is *uniformity*, since it is less the absolute reading of the thermometer than its oscillations, which are to be feared The habits of civilized life expose the organism to the effect of variations which never occur in nature, and this, associated with the impure atmosphere which architects, builders, and tenants unite to bring about, are the fertile sources of the dread disease for which so many remedies are discovered and for the cure of which so little can be done.—*Med. Press and Circular*, Nov. 7, 1888.

THE TREATMENT OF FATTY HEART.—Dr. Forchheimer's paper on "Fatty Heart," and the discussion to which it gave rise, at the recent meeting of the Association of American Physicians, at Washington (Medical News, October 6, 1888), brought into strong prominence the importance of the clinical distinction between fatty infiltrations of the heart and fatty degenerations of that organ. The pathological distinction is, as a rule, clear enough. The one is a fat overgrowth in the sub-pericardial connective tissue, in the grooves and furrows of the surface of the heart, and in the fibrous septa of the myocardium. When such overgrowth of fat becomes excessive, its presence interferes with the contraction of muscular fibres, and, consequently, with the nutrition of the heart, the force of which becomes impaired by atrophy of some groups of fibres, and secondary fatty degeneration of others.

Fatty infiltration is due to the causes which produce general obesity, and is associated with that condition. Dr. Forchheimer's expression, "obesity of the heart," well describes it.

On the other hand, fatty degeneration of the heart is a disease of the myocardium. The albuminoid constituents of the muscular fibre are split up, and microscopical particles of fat are deposited in their place. This condition may be caused by any of the numberless agencies, both constitutional and local, which seriously derange the nutrition of muscular tissue, and is only exceptionally associated, as, for example, in chlorosis, with general obesity. Where fatty degeneration is due to local disturbances of blood supply, as in obliterating endarteritis of a branch of the coronary arteries, the fatty change is usually of limited distribution, and since the unaffected parts of the wall of the cavity retain their normal contractile power, there is danger of the softened spot of degenerated tissue yielding upon stress, and rupture taking place—an accident which is, in point of fact, far from rare.

While the pathological pictures of these two conditions merely touch at their borders, or at most only slightly overlap; their clinical pictures, which alike present cardiac inadequacy without positive physical signs, are superimposed. Their differential diagnosis must, therefore, rest upon the constitutional rather than the cardiac morbid phenomena. The presence of general obesity—and the recognition of the conditions of life favoring fat accumulation will, in the absence of the evidences of the constitutional or local causes of derangement of nutrition, often justify the diagnosis of fatty infiltration; the reverse, that of fatty degeneration.

The diagnosis is, at present, of the highest importance in view of the growing interest and widening use of the dietetic-mechanical method of treating chronic diseases of the heart devised by Oertel, of Munich. While it may be admitted that certain cases of fatty degeneration, such as result from anæmia, chlorosis or the acute infectious diseases, may be cautiously subjected to this treatment, and that some of them are likely to receive permanent benefit from it; it is obvious that a large majority of such cases, and especially those occurring in the degenerative period of life, are not only unlikely to be benefited by it, save in the most general way, but are also liable to disastrous consequences. On the other hand, the method of Oertel, which is essentially his method of treating obesity, is the method of choice in fatty infiltration. Whatever may be the result of experience in its use in other forms of heart disease; whatever the outcome of the assaults now being made upon it on both sides of the Rhine, we may confidently predict that the combination of a guarded restriction of fluids, a diminished dietary, from which fats and excess of carbo-hydrates are excluded, and carefully regulated and graduated hill-climbing under well-thought-out rules, to which the name of the famed professor of Munich has been given, will constitute a permanent acquisition to our treatment of obesity of the heart as of the obesity of the body of which it is a part. The difficulties of diagnosis will always demand extreme caution in advising the use of this method in doubtful cases.—*Medical News.*

Treatment of Obesity.—For the relief of obesity many and various are the plans recommended, and occasionally something new appears on the surface. In looking over some of the late text-books, we find that authors follow in the footsteps of their predecessors, although Prof. Wood, in his work on "Therapeutics," refers to the use of saccharine for the treatment of obesity, diabetes, and other diseases when sugar is contra-indicated. Brunton suggests a variety of methods, amongst which may be mentioned, the alkalies and the vegetable acids, although the use of vinegar is discouraged as being very injurious; alkaline waters and sulphurous waters, and Bantingism—living on meat and green vegetables, and avoiding starch, sugar and fats, are favorably spoken of by this author, and Bartholow follows in the train of Brunton, recommending substantially the same treatment. Potter's suggestions are largely of the same character, although he especially advises systematic daily out-door exercise as the most efficient and least injurious. Murrell praises massage.

None of these authorities have referred to the method of treatment by confining the patient to a strictly dry diet, a plan which has proven very satisfactory in the experience of the writer. This method should be conducted in connection with the other well-known means at our service, just mentioned in the foregoing remarks, and when systematically followed out for a reasonable length of time, much good will be accomplished. It does not require that the patient should totally abstain from liquids, except at meal time, and the use of water in plenty may be permitted, either hot or cold, as seems best in the opinion of the medical attendant, but it should not be taken for at least two hours after eating.

A late issue of the British Medical Journal contains an interesting personal sketch, from the pen of Mr. W. Towers-Smith, whose treatment consisted in the use of rump steak, grilled cod, and a gallon of hot water in the twenty-four hours. The last thing taken at night was two tablespoonfuls of Scotch whisky in cold water and in the morning five grains of bicarbonate of potash. In two weeks the weight had been reduced eighteen pounds, when the amount of meat taken was reduced, as well as the water, and tea and coffee substituted along with toast. At the expiration of six weeks had been reduced thirty-four pounds, when the system was discontinued, with the result that he has returned to his regular diet and there is no tendency to get back into the old condition. A record of forty cases treated successfully in this manner is offered to recommend the method. Personally, he says he has derived great benefit from this treatment, and does not experience oppression in going up stairs, while his duties as a general practitioner, formerly fatiguing and irksome, are now attended to with comparative ease and comfort.

In this connection it may be remarked that doubtless many persons suffer in this way, who could be made comparatively comfortable in following their usual avocations, but the general practitioner does not think of reminding them of what can be accomplished in the way of treatment, and finds out only too late that they have places themselves in the hands of some quack who has guaranteed most wonder-

ful changes for a valuable consideration.—*Medical Register*, Nov. 10, 1888.

NEW METHOD OF TREATING DIPHTHERIA.—To the endless number of methods for treating diphtheria this author adds another which he has tested in a series of thirty-two cases, the report being read at a recent meeting of the Medical Society of Paris. The novelty of the method consists in the injection of perchloride of iron into the nares and fauces, the fluid being introduced into one of the nares and escaping by the other The irrigation should be made with a pocket syringe, beginning at the commencement of the disease, if the nares are not obstructed by false membrane, which would prevent the circulation of the fluid in the nasal cavity. This method would probably prevent the formation of false membrane, none having previously existed, or would destroy small portions already existing, would tend to favor the transformation of an anginose into a croupal diphtheria, and the ready secondary localization of the disease in the larynx and trachea. The conclusions which the author lays down are:

1. In the treatment of diphtheria cauterizations are often harmful, but may be advantageous; regular applications of caustic agents to the false membrane should be avoided.
2. Injections with five- to ten-per-cent. solutions of perchloride of iron have furnished the best results of any method of treatment in a large series of cases and at different epochs. These injections should be made as quickly as possible every quarter hour during the day and every half-hour at night, though mild cases do not require such assiduous treatment.
3. While this treatment is being carried out the patient must be kept upon a milk diet as far as possible.
4. If in the course of the diphtheria secondary phenomena should present themselves, such as high fever, constipation, etc., these symptoms must not be overlooked, but must receive appropriate treatment.
5. Injections practiced in the manner which has been suggested, will afford the best preventive against the contagion of this disease (*i. e.*, used as a means of prophylaxis.—Tr.)
6. Except in very rare cases the diffusion of the disease into the surrounding country may be prevented.
7. This plan of treatment is very easy of execution: it is easy for the patient, and easy for his physician and friends.
8. In some cases this method may readily be supplemented by other methods, such as the methods of Delthil, Geoffroy, and others.
9. It is quite inexpensive.
10. Trained assistants are not required; it can be carried out with certain precautions by almost any one.
11. It is also a good method of treatment for catarrhal, herpetic, and ulcerative anginas, and will, therefore, be useful in many cases in which the diagnosis is doubtful.—*Archives of Pediatrics*, Nov., 1888.

PNEUMONIA—ITS INCREASING DEATH RATE—ONE OF THE ESSENTIALS IN ITS TREATMENT.—Gouverneur M. Smith, M. D., of New York, in Med Record, calls attention to the increased mortality of pneumonia, substantiating his statements by statistics from the records of the New York Board of Health. The rate has steadily risen from 2,288 in 1878 to 3,707 in 1887—a much larger percentage than the increase in population. His point is that much greater attention should be paid to the ventilation of the sick-room, He says that in pneumonia the unaided portions of the pulmonary tissue are for the time being substantially useless for respiratory purposes, and neighboring portions are inclined to be cross and irritable. Complicating the situation, we find fever, more or less intense, and the abnormal heats frets the economy. Kidneys feverishly perform their work, springs, feeding the smaller and larger glands run dry, and scorched nervous centres rebel. Co-operative disquietude is manifest in every vital atom, and unless assuaged, a communistic strike, chaos—ashes to ashes!

Amid the bedlam, varying in degree with the extent of the initial lesion and collateral sympathy, one strong hope can animate the physician. In the natural course of events the pulmonary obstruction will disappear in a few days, and the lung or lungs gradually resume normal work. Can the patient be bridged to reach the climax? Can the uninvolved portions of the lungs respire sufficiently to maintain a tolerable condition of the blood until the critical period is possed? This is the great exigency—this is an absolute necessity.

It is clear that the blood requires aeration; can it be revived in any manner so efficiently as through the lungs, nature's method of arterialization? Can pill conceal oxygen, and smuggle through the gastric pouch life to the venous circulation? Can essence of ozone be given to substitute the process of sespiration? Can any zephyred antipyretic essentially promote hæmatosis? Resources there are to palliate pain, relieve thirst, abate fever, and stimulate flagging energies; and all important as these means are, they are almost insignificant as compared with affording pure air in superabundant quantity. While fresh air is essential in the management of all diseases, it is omnipotently indispensable in pneumonia, where the patient is using but a part of the breathing apparatus in the place of two lungs. It is more than ordinary ventilation that is required in such cases; what is needed is a persistent, systematic attention to a constant change of air in the apartment of the sick, by hour, by day, each hour, each minute, and each second, and the twin companion of each one who enters the sick-room should be a volume of genial, pure air.—*Epitome*. Nov., 1888.

CASCARA SAGRADA IN THE TREATMENT OF RHEUMATISM.—I have read an article in the August number of the Summary on the treatment of rheumatism with fluid extract cascara sagrada. I had several old chronic cases of various kinds of rheumatism amongst my patients, so at once I supplied several of them with a half otnce of the extract. The first case was F. Bonsall, aged 68 years. He had it so bed he could not rest, or walk without a cane or crutch. I found it the most severe in his right hip, thigh and knee. After taking ten drops at intervals of six hours for 48 hours, he could walk, was nearly free from pain; but his bowels were so active I ordered only five drops.

He continued at that; now he seems, and says he is, entirely well. Looks indicate his cure complete—only half an ounce.

David Tilson, a gentleman of 72 years of age, machinist, had been off work for over a month; his trouble was rheumatism of the ankles and feet, so he could not stand up. He had been doing all he could with cures from different physicians. I gave him one-half ounce extract cascara sagrada, did not see him for a week; he came into my office, said he was better—began to dance—than for the last ten years. I gave him from five to ten drops and nothing else. He called again in about three weeks, got an ounce, said he was all right, but wanted some of the medicine on hand.

The next two cases were ladies, one aged 62, and the other 70 years of age. One had a general rheumatic condition all over her osseous and the muscular system—might be called muscular and articular, or both. The 62-year-old lady had been for years so crippled she could not walk, and especially painful at night in her ankles; no swelling to signify. Both these cases had the same treatment: six drops three times a day, and a bottle of "placebo," tincture of lavender or some other pleasant herb, to be taken also once in six hours, alternating with the cascara sagrada. They are both comparatively well and rest well; the weak-jointed woman says she can walk better than for several years. Not regarding any further report of individual cases necessary, will say I have now treated ten cases with greater success than I ever had in curing ague with quinine.—James M. Hole, M. D., in the *Medical Summary*, November, 1888.

THE TREATMENT OF INCONTINENCE OF URINE BY RHUS AROMATICA.—Rhus aromatica has recently come into vogue in France as a remedy for incontinence of urine in atonic states of the bladder. According to La Thérapeutique Contemporaine, Drs. Max, Burvenich, Numan, and Hamon have all tried it in this disorder, and have obtained signal successes where all other remedies have failed.

Max prepares a tincture by macerating 200 grammes of the bark in 1000 grammes of alcohol at 80° F. The dose is from 10 to 15 drops three times a day. Max claims 9 cures out of 11 cases. Burvenich obtained a cure in 11 out of 33 cases; 10 of the remaining 22 were considerably benefited. The good effect of the medicine is not felt till the fifth or sixth day; sometimes satisfactory results are not perceived till at the end of three or four weeks.

According to Burvenich, Rhus aromatica constitutes a powerful tonic similar to nux vomica, for in a man aged 79 years, affected with incomplete paralysis of the bladder without stricture of the urethra or hypertrophy of the prostate, rhus aromatica, in the dose of 30 drops a day, greatly facilitated micturition by giving tone to the bladder. Numa also asserts that it excites the unstriped muscles of the bladder as well as of the uterus and the rectum. He gives the tincture to children from two to six years of age in the dose of 10 drops twice a day, and to older children in the dose of 15 drops night and morning. The tonic effects do not last, for the paresis of the sphincter vesicæ muscle returns when the medicine is discontinued.

Hamon has also testified to the efficacy of rhus toxicodendron in certain cases of incontinence of urine, with atony, in young persons. He gives 20 drops at bedtime in a little simple elixir, or other convenient menstruum. This use of rhus toxicodendron is not new.

The rhus aromatica is the fragrant sumach, which is indigenous in this country, growing in dark rocky soil from Vermont to Michigan, Kentucky, and westward. It is a low straggling bush with sweet-scented leaves. The rhus toxicodendron is the well-known poison ivy.—*Boston Medical and Surgical Journal.* November 8, 1888.

DYSPEPSIA IN YOUNG CHILDREN.—Epotius recommended irrigation of the stomach in 1863; this practice has been carried out by the author for several years, and he has formulated rules concerning the indications for irrigation of the stomachs of children. This should be practiced in such a way as to produce as little disturbance as possible with the food that is in the stomach. The plan was tried by the author in eighteen cases of acute or chronic dyspepsia; one of the patients being also affected with severe capillary bronchitis. This disease is not a contraindication to irrigation; in fact, the removal of the bronchial mucus from the stomach is beneficial rather than otherwise. The author habitually used for the operation an English catheter, No. 11 or 12, which could be introduced without any diffiuclty. The rancid or acid contents of the stomach sometimes obstructed the orifice of the catheter, but by injecting the water slowly and in small quantity all the contents of the stomach were gradually removed. In some cases it was found desirable to lower the child's head for the more ready exit of the fluid. In very few cases was this treatment continued beyond the eighth day. In the majority of cases a single irrigation was sufficient to check vomiting and prevent its recurrence. After the irrigation the children became quiet, willingly took nourishment, the stools were no longer diarrhœal, the general condition improved, and the weight increased. The irrigation may be practised once daily, if necessary, two or three hours after the first meal or nursing. After a few days of such treatment the author gave in addition the tincture of the perchloride of iron and glycerin. If the reaction of the stomach were acid, bismuth was given, and to children who were old enough, an extract of beef and sherry wine.—*Archives of Pediatrics*, Nov., 1888.

BINIODIDE OF MERCURY SPRAY IN TUBERCULOSIS.—Drs. Miquel and A. Rueff have published a work on the treatment of pulmonary tuberculosis by sprays with the biniodide of mercury. The experiments of Dr. Miquel having showed him that the biniodide of mercury is microbicide in solutions of 1 in $\frac{1}{10000}$, he was induced to try it against pulmonary pathisis, and this he has done in conjunction with Dr. Rueff. They have established spray apparatus at the Rothschild Hospital, and have submitted phthisical patients to the vapors of the biniodide of mercury, or rather the iodo-hydrargyrate of potassium. The following is the formula of the solution employed for the sprays:

℞ Biniodide of mercury, 1 part,
Iodide of potassium, 1 part,
Distilled water, 1000 parts, all by weight.

But whether medicamentous liquids in the form of spray penetrate into the trachea, the bronchial tubes, and their ramifications, is a question that has not yet been satisfactorily solved. Denied by some, this penetration is admitted by others, and appears to have been demonstrated by the experiments of Drs. Miquel and Rueff. It may, however, be observed that of the 27 patients submitted to this treatment 19 improved and 8 remained stationary; the improvements were, therefore, at the at the rate of 70 per cent. In these cases attenuation of the pulmonary lesions was obtained, and particularly diminution of the expectoration and increase in the weight of the patients. In two cases even the disappearance of bacilli was established.—Paris letter to *London Lancet*, November 3, 1888.

On the Diuretic Action of Strophanthus.—Dr. Lemoine, of Lille, has made a communication to the Société de Biologie, Paris, relative to the diuretic action of strophanthus. Of all the effects of this medicament, he says, polyuria is the most constant. He has always obtained such effect on giving experimentally to healthy indviduals the tincture of strophanthus. In doses of from five to ten drops, almost double the daily quantity of urine is voided. This increased quantity of diuresis he has also generally obtained in cardiac patients, unless there be complete asystole, in which case strophanthus rarely succeeds in restoring diuresis. He has also met with want of success when strophanthus has been given in extensive œdema of the lungs.

The diuretic effect of strophanthus lasts long after discontinuance of the medicine. In some cases, when before treatment the daily quantity of urine voided was only 400 grammes, he has known it to increase to 3000 under strophanthus; and a fortnight after suspension of the remedy the patients were still voiding two litres a day.

As for the diaphoretic effect of strophanthus, he has found it feeble, if not nil.—*Boston Medical and Surgical Journal*, Nov. 15, 1888.

Effect of Lanolin on Micro-organisms.—The results of Gottstein's experiments on this subject are thus given in the Deutsche Med. Zeitung, Berlin: 1. The bacteria which effect a spontaneous decomposition of glycerin fats belong presumably to the class of anærobes: a number of aerobe germs (even the putrefactive) perish in a medium containing fat. But the term of continuance of this retrogressive metamorphosis is decided by the proportion of fat to the other ingredients of the nutritive medium. 2. Free fat contains anærobes for some days after it is exposed: but lanolin has under similar circumstances neither ærobe nor anærobe germs. 3. Glycerin fats may be so impregnated with bacteria that the latter can pass through the fat to the lower-lying infectible substances, while the lanolin cannot be permeated by bacteria. It acts, therefore, as a preventive of decomposition when laid over infectible substances.—*British Medical Journal*, Nov. 10, 1888.

Antiseptic Pastilles in Diphtheria.—Vaumond (Wiener Medizin. Presse, No. 42, 1888) recommends the following as a prophylactic in diphtheria, especially for smaller children who cannot gargle and in whom applications to the pharynx are difficult:

℞ Acid. boric., 20 parts.
Sodii benzoat., 1 part.
Ol. thymi, ½ to 1 part.
Sodii biborat., 20 parts.
Acid. citric, 12½ parts.
Ol. limonis, 1½ parts.
Ol. menthæ, ½ part.
M.

Each pastille should weigh thirty grains and contain one-third of a grain of boric acid and one-thirtieth each of benzoate of sodium and of oil of thyme. As a solvent and basis, glycerin, water, gum, and sugar are used, and to give the mass consistence some gelatin is added.—*Medical News*, Dec. 1, 1888.

The Hypnotic Action of Sulfonal.—The conclusions drawn by Mathes are as follows: 1. Sulfonal is a useful hypnotic agent, though it is not always efficacious. 2. It has the advantage over other agents of having no odor, no taste, and no influence on the essential organs. 3. It caused disagreeable effects in only a very small number of cases; and the worst of them was usually insignificant. 4. The dose is variable, and depends on individual susceptibility. Generally a gram is sufficient to cause sleep without accessory manifestations. When these are produced the dose should be diminished. On account of its slow action it should be given at least an hour before the time for sleep. 5. When the insomnia is due to an irritating cough or to pains not clearly neuralgic, the use of sulfonal is contra-indicated. In most true neuralgias, on the contrary, it may be used with benefit.—*Jnl. Amer. Med. Assoc'n.*

Secale Cornutum in Polyuria.—Secale cornutum has been employed by Bucquoy in polyuria, always with good results, when this affection was of a nervous character, and even in cases also, when treatment with valeriana had proven useless; the latter, besides, by its troublesome cumulative action, in view of the large quantities requisite, became doubly unpleasant. In one case, described at great length, the daily quantity of urine was reduced after a few days' treatment with secale cornutum, from 14 L to 2 L, without again increasing after discontinuing the administration of the remedy.—*Journ. de Pharm. et chim.* 1888, t, xvii, p. 633.

Lanolin and Ichthyol in the Erysipelas.—Nussbaum recommends the application of an ointment containing equal parts of lanolin and ichthyol in the treatment of erysipelas. He covers the affected area with salicylated wool, and claims to obtain a painless cure in two or three days.—*Medical Press and Circular*, November 7, 1888.

INDEX TO VOLUME VI.

Page.

Abernethy, Dr. J. C., Rhea Springs, Tenn., on Hot Water Treatment of Carbuncle..... 247
Abdominal Disease, on the Use of Codeine to Relieve Pain in..... 305
Pain, Codeine in..... 453
Surgery, Notes on..... 49
Abortion, Treatment of, in Obstetrical Clinic of Florence..... 95
Abortive Treatment of Buboes 72
Abscesses, a New Method of Treating..... 478
Mammary, Sponge Dressing for.... 238
Abscess, Pulmonary, Operative Treatment of... 475
Retropharyngeal..... 5
The Treatment of..... 330
Acetic Acid and Ergot in Post-Partum Hæmorrhage..... 118
Acne, Treatment of..... 120
Unna's Treatment of..... 260
Aconitine and Digitaline..... 256
Adjuvant to Creasote, Balsam of Tolu as an.... 334
Advertisers, Slick..... 324
Æropathy, Dujardin-Beaumetz, on..... 360
After-Pains and Dysmenorrhœa, Nitrite of Amyl in..... 70
Agalactic, Antipyrine as an..... 360
Agaracine in the Sweating of Phthisis..... 335
Alanine, Mercuric, in Syphilis..... 215
Aluminum, Sulphide of, a New Antiseptic..... 515
Albuminuria and Life Insurance..... 513
Alcohol and Quinine in the Treatment of Fever, 1
in Health and Disease..... 121
in Medicine..... 245
Modes of Administration of, in Disease, 309
or Apoplexy..... 314
the Use of, in Fever..... 13
Alcoholism, a Hypnotic for Use in..... 256
Alkalies in the Treatment of Eczema..... 497
Alkaloids, Hypodermatic Use of..... 384
Allen, Dr. A. R., Carlyle, Penn., Clinical Notes on Jambul in Diabetes..... 242
Alterative, Syrup Trifolium Comp. as an..... 84
Alum in Typhoid Fever 144
Alveloz Milk in Cancer 390
Ambrook, Dr. Charles, Boulder, Colorado, on Man, the Beast 277
Amenorrhœa..... 350
Electricity in..... 22
American Medical Association.....107, 230
State Medicine at the Meeting of, 154
Pharmacy, Foreign Appreciation of.. 311
Ammoniacal Urine, Saccharin in..... 551
Ammonium, Chloride of, in Neuralgia..... 528
Amputation, a Case of Lupus Exedens Necessitating..... 244
Amylen Hydrate as a Hypnotic,. 328
Amyl, Nitrite of, in After-Pains and Dysmenorrhœa 70
Anæmia, Nutrient and Sedative..... 480
Pernicious..... 380
the Treatment of.....389, 417, 468, 491
Anæsthesia, the Value of Ether During..... 504
Anæsthetic, Chloral as an, During Labor..... 363
Chloroform as an..... 356
Erythrophleine the New 63
the, of the Ancients 307
Ancients, the Anæsthetic of the..... 307
Anderson, Dr. John, Fulton, Ky., on a Hint in Regard to the Administration of Cascara Sagrada..... 298

Page.

Anderson, Dr. L. B., Norfolk, Va., on Stigmata Maidis..... 364
Angina Tonsillaris, the Treatment and Prophylaxis of..... 20
Anodyne Liniment..... 520
Anomalies of Nature, Some..... 296
Anthrarobin, its Chemistry and Application in Skin Diseases.....188, 191
Anthrophores, Treatment of Gonorrhœa by.... 189
Antifebrine, the Superiority of, Over Antipyretics..... 262
Versus Antipyrine..... 357
Antipyretics, the Superiority of Antifebrine Over, 262
Antipyrine..... 105
a Danger Ahead in 144
a Peculiar Effect of..... 454
and Its Dangers..... 397
as an Agalactic..... 360
as a Uterine Sedative..... 516
the Abuse of..... 336
the Contra-Indications and Dangers of..... 239
the Technique of Hypodermical use of 24
Indications and Contra-indications of..... 238
in Labor..... 325
in Sea-Sickness..... 311
in the Treatment of Chorea..... 168
Versus Antifebrine 357
Antisepsis in Typhoid..... 455
Antiseptic Lozenges in Lung Diseases..... 167
Bandages..... 351
Midwifery.....9, 80, 102, 131, 155, 177
Solution, a Safe..... 520
Spray..... 352
Substances, Hypodermic Injection of, in Pulmonary Phthisis..... 432
Sulphite of Aluminum a New..... 515
Surgical Dressing, a New..... 311
Hypodermic Injections of..... 382
in Ophthalmic Surgery..... 316
Tooth-Washes.....144, 352
Antispasmodic and Sedative, Collinsonia Canadensis as an..... 120
Aorta, a Case of Atheroma of..... 81
Aortic Valve, Rupture of an..... 228
Aphorisms on Diseases of Children..... 314
Aphthæ, the Treatment of..... 256
Apomorphine, Hydrochlorate of, in Dry Cough, 72
Aulde, Dr. John, Philadelphia, Penn., on the Oxygen Treatment..... 393
Armstrong, Dr. Oscar S., Detroit, Mich., on Pichi in Vesical Irritation..... 313
Arsenic, the Treatment of Warts by Internal Administration of..... 117
Arteries, Hypertension of..... 354
Atheroma of Aorta, a Case of..... 81
Atkinson, Dr. Wm. B., Philadelphia, Pa., on Umbilical Hernia 29
Atrophy of the Mammary Glands, Electricity Employed in..... 264

BOOK NOTICES

Abdominal Surgery. By Dr. Hal C. Wyman, 424
A Manual of Pharmacy and Pharmaceutical Chemistry. By Charles F. Huebner..... 112
Applied Anatomy of the Nervous System. By Dr. A. L. Ranney 328
A Practical Treatise on Diseases of the Skin. By Dr. J. V. Shoemaker..... 110

BOOK NOTICES—CONTINUED. Page.

A Practical Treatise on Materia Medica and Therapeutics. By Dr. Roberts Bartholow 39
A Practical Treatise on Diseases of the Skin. By Dr. James Nevin Hyde..... 207
A Practical Treatise on the Medical and Surgical Uses of Electricity. By Dr. George M. Beard..... 111
A System of Obstetrics. By American Authors..... 303
A Text Book of Human Physiology. By Dr. Austin Flint..... 448
Atlas of Venereal and Skin Diseases. By M. Kaposi *et al*..... 183
Clinical Atlas of Venereal and Skin Diseases. By Dr. R. W. Taylor..... 349
Clinical Lectures on Albuminuria. By Dr. Thos. Granger Stewart..... 544
Clinical Letures on Nervous Diseases. By Prof. J. M. Charcot..... 543
Diet Tables. By Reed and Carnrick..... 350
Diseases of the Heart and Circulation in Infants and Adolescence. By Dr. John M. Keating..... 183
Disorders of Menstruation. By Dr. Ed. W. Jenks..... 304
Doctor and Patient. By Dr. S. Weir Mitchell..... 112
Ectopic Pregnancy and Pelvic Hæmatocele. By Dr. Lawson Tait..... 561
Essentials of Medical Chemistry and Urinalysis. By Dr. Sam E. Woody..... 328
Fever Nursing. By Dr. J. J. Wilson..... 183
Health Lessons—A Primary Book. By Jerome Walker..... 112
Intubation of the Larynx. By Dr. J. E. Waxham..... 448
Language of Medicine. By Dr. F. R. Campbell..... 327
Manual of Dietetics. By Dr. W. B. Pritchard..... 561
Manual of General Pathology. By Dr. J. F. Payne..... 518
Medical and Surgical Monographs..... 561
Obstetric Synopsis. By Dr. John S. Stewart 184
Physician's Leisure Library—Diseases of the Liver. By Dujardin-Beaumetz..... 495
Physician's Leisure Library—The Infectious Diseases. By Karl Liebermeister..... 349
Physician's Interpreter in Four Languages. By M. Von V..... 472
Pictorial History of Ancient Pharmacy. By Hermann Peters..... 561
Ptomaines and Leucomaines, or the Putrefactive and Physiological Alkaloids. By Dr. V. C. Vaughan..... 469
Questions and Answers on the Essentials of Physiology..... 184
Rectal and Anal Surgery. By Dr. Edmund Andrews..... 40
Reference Hanbook of the Medical Sciences. By Dr. A. H. Buck..... 424
Report of the Eye and Ear Department of St. Mary's Hospital. By Dr. Eugene Smith..... 447
Six Hundred Medical Donts'; or the Physician's Utility Enhanced. By Dr. Fred. C. Valentine..... 40
System of Gynecology. By American Authors..... 496
Text-book of Materia Medica and Therapeutics. By Dr. Robert T. Edes..... 38
Text-book of Pharmacology, Therapeutics and Materia Medica. By Dr. T. Lauder Brunton..... 448

BOOK NOTICES—CONTINUED. Page.

Theory and Practice of the Ophthalmoscope. By Dr. J. H. Claiborne..... 448
Therapeutics: Its Principles and Practice. By Dr. H. C. Wood..... 447
The Hygiene of the Skin, or the Art of Preventing Skin Diseases. By Dr. A. Ravougli..... 183
The Intestinal Diseases of Infancy and Childhood. By Dr. A. Jacobi..... 112
The Modern Treatment of Headaches..... 184
The New Treatment of Metritis. By Dr. George Apostoli..... 184
The Practice of Medicine, or the Art of Specific Healing. By Dr. I. J. M. Goss..... 303
The Rectum and Anus: Their Diseases and Treatment. By Dr. Chas. B. Ball.. 112
The Rules of Aseptic and Antiseptic Surgery. By Dr. A. G. Gerster..... 111
The Surgical Diseases of the Genito-Urinary Organs, Including Syphilis. By Dr. E. L. Keyes..... 182
The Treatment of Pleurisy and Pneumonia, By Dr. G. M. Garland..... 207
The Treatment of Hæmorrhoids by the Injection of Carbolic Acid and Other Substances..... 184
The Year-book of Treatment for 1887..... 184
Transactions of the Michigan State Medical 519
Treatise on Fractures and Dislocations. By Dr. L. A. Stimson..... 424
Treatise on the Diseases of Women. By Dr. Alexander J. C. Skene..... 518

Balsam Copaiba in Chronic Cystitis..... 449
of Tolu as an Adjuvant to Creasote. .. 334
Barber, Dr. Hiram, Sing Sing, N. Y., on Syrup Trifolium Compound..... 387
Bartholow, Dr. Roberts, Philadelphia, Penn., on the Address in Medicine..... 224
Basedow's Disease—Vomitus Hystericus 467
Bell, Dr. Sam'l, Port Hope, Mich., on a Few Fatal Cases in Obstetric Practice..... 28
Dr. Samuel, Detroit, Mich., on Placenta Prævia..... 483
Bell's Paralysis, Two Cases of..... 558
Belladonna for Hemorrhoids..... 33
Bergeon Treatment..... 243
Berlin Letter..... 343, 511
Bethol, Salol and Naphthol..... 70
Bettleheim, Remedy for Tape-worm..... 64
Bichloride Acid Solution..... 208
Bile, Gastric and Pancreatic Juice, Influence of Condurango on the Secretion of..... 456
Biliousness, the Treatment of..... 68
Biller, Dr. J. G., Correctionville, Ia., on Pichi, 371
Biniodide of Mercury, the Use of in Surgery.... 240
Spray in Tubercolosis.... 567
Binz, Dr. C., Bonn, on Alcohol in Medicine.... 245
Bismuth Salicylate, the Therapeutic Value of... 190
Sub-benzoate of, an Escharotic..... 23
Bladder, Irritable, and Frequent Micturition in Females..... 502
the Local Treatment of Diseases of the, 432
Bleeding from the Nose, Treatment of..... 384
Bondenhamsr, Dr. Wm., New York, on Old Physic..... 155
Boils and Carbuncles, a New Treatment of..... 115
Boldin, the Hypnotic Action of..... 119
Boric Acid in the Treatment of Cystitis..... 216
Boro-Glycerin for Pessaries..... 14
Breast, Amputation of..... 531
Cancer of..... 435
Brignt's Disease, Pichi in Hæmaturia Renalis of..... 82

Page.

Bromide of Ethyl..... 24
Bronchial Affections, Cocaine Spray in..... 456
Bronchitis, Chronic..... 506
Chronic, Geranium Maculatum in... 192
Putrid, Treated by Corrosive Sublimate..... 216
Bronchocele, Phytolacca Decandra for..... 148
Bronchorrhœa, Terebene in..... 455
Brownell, Dr. A. H., Hastings, Nebraska, on Antipyrine and Its Dangers..... 397
Buboes, the Abortive Treatment of..... 72
Burns, the Treatment of..... 480
Burres, Dr. W. F., Sidney, Ill., on Concussion Caused by Railway Accidents..... 367
Bryonia Dioica in Uterine Hæmorrhage..... 120

Cactus Grandiflorus in Heart Disease..... 480
Calcium Chloride in Glandular Affections of the Neck..... 429
Calomel and Naphthalin in Typhoid Fever..... 46
Hypodermic Injections of, in Syphilis.. 250
as a Diuretic in Cardiac Dropsy 450
in Phthisis..... 551
Camphoric Acid, Local Application of..... 358
Cancer, Alveloz Milk in..... 390
Chian Turpentine for..... 168
of Breast..... 435
of the Prostate..... 50
of the Stomach, Another Case of Apparent Cure of, by Condurango. 287, 334, 431
the Increase of..... 85
Thuja Occidentalis in..... 528
Resorcin in..... 240
the Chian Turpentine Treatment of.... 357
Savine in the Treatment of..... 96
Cannabis Indica Mixture for Phthisis..... 335
Therapeutic Indications for the Use of..... 525
Cannula, Tracheotomy Without..... 253
Carbolic Cauterizations in Diphtheria..... 213
Carbo-Oxygen Treatment for Consumption and Other Forms of Wasting Diseases..... 152
Carbonic Acid, Rectal Injections of, in the Treatment of Vomiting of Pregnancy..... 404
Carbuncles and Boils, a New Treatment of..... 115
Hot Water Treatment of..... 247
Cardiac Dropsy, Calomel as a Diuretic in..... 450
Poison, Vernonin, a New..... 286
Cascara Sagrada..... 288, 552
in Rheumatism..... 345, 566
Formula of '87..... 556
a Case Illustrating the Proper Mode of Administering..... 104
a Hint in Regard to the Administration of..... 298
in Solution with Iron and other Drugs..... 503
Note on Some of the Disadvantages of..... 309
with Salicylate of Soda in Rheumatism..... 504
Some Recent Discoveries in... 62
Cascara Cordial in Summer Diarrhœa..... 512
Cataract..... 464
a Reputed Solvent for..... 452
Catarrh and Its Effects on the System, Notes on, 78
Catarrhal Conjunctivitis..... 328
Diphtheria..... 134
Catheterization, Exploratory, of the Male Ureter, 310
Cattle, Prophylactic Measures against Tuberculosis in..... 453
Caustic Crayons, Formula for..... 192
Cautery, Actual, to the Scalp, Treatment of Epilepsy by Means of..... 312

Page.

Cauterization of the Throat in Diphtheria, and the Forcible Removal of False Membrane, Are They to be Recommended ?..... 137
Cerium, Oxalate of, in Sea-Sickness..... 311
Certain Remedies, Time for Administration.... 72
Cervical Needle, Description of a New, with Some Points Relating to "Emmet's Operation..... 289
Chadwick, Dr. H. J., Hart, Mich.,
On a Case of Atheroma of Aorta..... 81
On Pessaries..... 341
Chaffee, Dr George, Bluehill, Neb., on Pichi in Hæmaturia Renalis in Bright's Disease..... 82
Chase, Dr. A. G., Millwood, Kansas, on Belladonna for Hæmorrhoids..... 33
Chekan..... 521
in Pneumonia..... 83
Chian Turpentine for Cancer..... 168, 357
Chicago Medical Society..... 5, 58, 228
Chilblain, a Salve for..... 240
Children, Administration of Medicine to..... 262
Aphorisms on Diseases of..... 314
Convulsions in..... 282
Diseases of..... 366
Earache in, Treatment of 118
Habitual Constipation in..... 522
Incontinence of Urine in..... 350
Iodol in Surgery Among..... 70
Lavage in..... 168
Malarial Fever in..... 381
Practical Hints About..... 333
Rectal Alimentation in..... 142
Medication for..... 287
Summer Diarrhœa of..... 322, 337
Treatment of Eclamptic and Uræmic Convulsions in..... 379
Treatment of Meningitis in..... 256
Chills and Fever, Useful Formula in..... 240
Chionanthus and Rhus Aromatica in Diabetes.. 528
Chloral in Diphtheria 213
as an Anæsthetic During Labor..... 363
Chlor-anodyne..... 336
in Hiccough..... 519
in Toothache..... 264
Chloride of Ammonium in Neuralgia 528
of Sodium, Hypodermic Injections of, in Collapse..... 48
Chloroform as an Anæsthetic..... 336
Who First Discovered?..... 202
Chorea..... 433
Antipyrine in the Treatment of..... 168
Chloride of Methyl Spray in..... 384
Cholera, Was It?..... 392
Infantum..... 520
Christian, Dr. E. P., Wyandotte, Mich., on the Differential Symptomatology of Typhoid Fever..... 25
on the Statistical Examination as to the Use of Ergot in Parturition, etc., 553
Cigarette Smoking, Dyslalia from..... 484
Poisonous Effect of..... 431
Circumcision, Therapeutics of..... 333
Cirrhosis of the Liver with Ascites..... 60
Clark, Dr. J. E., Detroit, Mich., on Gonorrhœal Peritonitis..... 292
Clemesch, Dr. J. W., Port Hope, Ont., on Pichi in Vesical Troubles..... 492
Clinical Lectures..... 275, 314, 481, 505
—Examination of the Patient, 145
on Retention of Urine..... 485
Notes on Jambul in Diabetes..... 242
Clouse, Dr. W. H., Crestline, Ohio, on Reduction of Strangulated Inguinal Hernia by Taxis and Rectal Injections..... 466

Page.

Coca, Extract of, in Gastralgia..... 24
Cocaine, Antidotes to..... 288
in Hydrophobia..... 480
Locally in Vaginismus..... 477
A Novel Extension of the Uses of.... 256
in Gout..... 71
Spray in Bronchial Affections..... 456
in Stomach Affections..... 24
in Painful Micturition of Gonorrhœa.. 48
in Quinsy..... 504
Saccharite of..... 192
Coccygodynia and Pruritus Ani, a New and Reliable Remedy for..... 239
Codeine in Abdominal Pain..... 453
and Morphine, Comparative Value of, in the Treatment of Diabetes..... 353
On The Use of, To Relieve Abdominal Disease..... 305
Cod-Liver Oil, Lipanine, A Substitute for..... 143
A Substitute for..... 456
Colburn, Dr. J. E., Chicago, Ills., On A Case of Epilepsy Cured (Apparently) by The Correction of an Error in Refraction..... 125
Cold Water Enemata, Catarrhal Jaundice Treated by..... 36
Collapse, Hypodermic Injections of Chloride of Sodium in..... 48
Collar, Dr. A. J., Luther, Mich., on Two Cases of Placenta Prævia..... 104
Colleges and Doctors..... 249, 277
Collinsonia Canadensis, Fluid Extract, as a Sedative and Antispasmodic..... 120
Collodion, Parosi's Hæmostatic..... 352
Salicylicum, Colorless, For Corns and Warts..... 256
Comedones, On The Treatment of..... 456
Conception and Gonorrhœa..... 82, 321
Prevention of..... 493, 536, 559
Concussion Caused by Railway Accidents..... 367
Condurango, Another Case of Apparent Cure of Cancer of the Stomach by.... 287, 334
as a Stomachic..... 96
Influence of, On the Secretion of the Gastric and Pancreatic Juice, and On the Bile..... 456
in the Treatment of Cancer of the Stomach..... 431
Conjunctivitis, Catarrhal..... 328
Conservative Surgery..... 101
Constipation, Habitual, in Children..... 522
Postural Treatment of..... 427
Consumption, Pulmonary, Sulphurous Acid Treatment of..... 187
and Other Forms of Wasting Diseases, Carbo-Oxygen Treatment for..... 152
Convulsions in Children..... 282
Eclamptic and Uræmic, Treatment of in Children..... 379
Puerperal, and Peritonitis..... 350
Treatment of..... 192
Corn Silk..... 504
Corns and Warts, A Remedy for..... 328
Colorless Collodium Salicylicum for..... 256
Corrosive Sublimate in Obstetric Practice..... 47
Putrid Bronchitis..... 216
Coryza, A Snuffing-Powder for..... 96
Cracked Nipples, A Remedy for..... 256
Cram, Dr. C. W., Davenport, Iowa, on the Treatment of Anæmia..... 417
Cramp, Common and Allied Affections..... 509
in the Leg, How to Treat..... 133
Crayons Caustic, Formula for..... 192

Page.

Creasote, Balsam of Tolu as an Adjuvant to.... 334
Hypodermically in Phthisis..... 304
Intra-Pulmonary Injection in..... 312
Creolin, the Poisonous Character of..... 552
Croup, Membranous, Pepsin in the Treatment of.....541, 545
Cullen, Dr. Chas. R., Richmond, Va., on Medical Paupers..... 75
on Placenta Prævia..... 178
Cupp, Dr. M. F., Metamora, Ind., on Antiseptic Midwifery.....80, 131
on Fogyism..... 344
Cutaneous Manifestations of Syphilis.....173, 193
Cystic Tumor, Congenital..... 481
Cystitis, Boric Acid in..... 216
Chronic, Balsam Copaiba in..... 449
New Remedy for..... 119
in the Female, Treatment of..... 45
Chronic, Cure by Pichi..... 186
Fluid Extract Pichi in....343, 365, 398, 512
and Nephritis, Pichi in..... 419

Debove's Method of Super-Alimentation, the Therapeutics of Pulmonary Consumption by.. 89
Delirium Tremens, Methylal in.....142, 168
Dermoid Vegetations and Epitheliomata, Thuya Occidentalis in the Treatment of..... 312
Detroit Medical Colleges..... 134
Diabetes, Clinical Notes on Jambul in..... 242
Comparative Value of Codeine and Morphine in the Treatment of..... 353
Mellitus..... 333
and its Treatment..... 288
Saccharin in..... 96
Sizygium in..... 119
Sizygium Jambolana in..... 83
The True Place of Milk in the Treatment of..... 66
Rhus Aromatica and Chionanthus in.. 528
Saccharine in..... 144
Semolina in..... 335
the Curability of..... 69
Use of Saccharine in..... 211
Diabetic Regimen of Dujardin-Beaumetz..... 504
Diagnosis of Gastric Affections..... 516
Diarrhœa, Chronic, a Valuable Remedy for..... 383
Treatment of..... 336
by Talc..... 360
Lactic Acid in..... 120
Summer, Cascara Cordial in..... 512
of Children..... 337
the Summer, of Children..... 322
Dickey, Dr. W. A., Tiffin, Ohio, on Quinine and Alcohol in the Treatment of Fever..... 1
Dietetics and Infant Feeding..... 197
Digestion, Abstract of a Paper on Aids to..... 281
Digitaline and Aconitine..... 256
Digitalis and How to Use it..... 475
in the Treatment of Pneumonia..... 143
Diphtheria, Carbolic Cauterizations in..... 213
Chloral in..... 213
Lemons as a Prophylactic of..... 297
New Method of Treating..... 566
Nature and Treatment of..... 436
Pastilles, Antiseptic in..... 568
Pepsin in the Treatment of.....541, 545
the Prophylactic Treatment of..... 287
Treated by Perchloride of Iron and Milk..... 47
the Treatment of.....12, 476
Treatment of, with Perchloride of Iron and Milk..... 239
Tripsin in..... 304
Turpentine in..... 166

Page.

Disease, Modes of Administration of Alcohol in, 309
Disinfection of the Hands..... 208
Diuretic, a Useful..... 264
Strophanthus as a..... 568
Calomel as a, in Cardiac Dropsy..... 450
Doane, Dr. L. Galvani, New York, N.Y., on the Treatment of Anæmia, 491
on Pyrogallic Acid in Eczema..... 513
on Antiseptic Midwifery, 102
Doctors and Colleges.....249, 277
Dog Bites, Treatment of..... 120
Drainage and Dressing..... 369
Wound Treatment Without..... 501
Dressing and Drainage..... 369
Dropsy, Cardiac, Calomel as a Diuretic in..... 450
Druggist and Physician, Relation of..... 536
Druggists vs. Physicians..... 418, 469, 489
Drugs and Sleeplessness..... 398
Some New..... 372
Stores, Night Service in..... 359
Dry Cough, Hydrochlorate of Apomorphine in, 72
Duckwall, Dr. F. A., West Baltimore, O., on Some Anomalies of Nature..... 296
Dunn, Dr. W. M., Cuba, Mo., on Cascara Sagrada in Rheumatism 345
Dunstone, Dr. William, Hancock, Mich., on Gonorrhœa and Conception..... 321
Dujardin-Beaumetz, Diabetic Regimen of..... 504
on Aeropathy..... 360
Dysentery, Treatment of..... 379
Dyslalia from Cigarette Smoking..... 484
Dysmenorrhœa and After-Pains, Nitrite of Amyl in..... 70
Electricity in..... 22
the Treatment of..... 264
Dyspepsia, Convenient Combination for Administering Hydrochloric Acid in 167
Flatulent, Treatment of.... 38, 216, 375
of Infants..... 480, 567
Some New Thoughts on..... 156, 529
Treatment of..... 113, 178, 407
Dyspnœa, Quebracho in 216, 233, 546, 552
Dwarf with Deformed Pelvis, Pregnancy in.... 130

Earache in Children, Treatment of..... 118
Ecchymosis..... 533
Eclampsia, Puerperal..... 208
Eclamptic and Uræmic Convulsion in Children, Treatment of..... 379
Eczema, Alkalies in the Treatment of..... 497
Infantile..... 360
Pyrogallic Acid in..... 513
Electrical Terms and Expressions, on the Use of, 361
Electricity, Abuse of..... 166
Katalytic Action of, Its Practical Value in Rheumatic Affections.... 425
in Amenorrhœa, Dysmenorrhœa and Menorrhagia..... 22
the Employment of in Atrophy of the Mammary Glands..... 264
in Treatment of Fibroid Tumors.... 65
Treatment of White Swelling by.... 335
Electrolysis, the Application of..... 241
Treatment of Urethral Stricture by, 342
Electro-Therapeutics in Spermatorrhœa..... 192
Elixir Paraldehyde..... 168
Elmore, Dr. F., B. E. City, Minn., on The Social Reform Question..... 396
Ely, Dr. J. A., Medina, Mich., on Phytolacca Decandra for Bronchocele..... 148
Emetic, Tartar, Treatment of Pneumonia with, 430
" Emmet's Operation," Some Points Relating to, with a Description of a New Cervical Needle, 289

Page.

Emperor Frederick's Throat, the Late..... 346
Empyema in Children, Subperiosteal Resection of Rib for..... 13
Endometritis, Chronic Cervical..... 40
Enema, Nutritive and Sedative..... 384
Engstad, Dr. J. E., Grand Forks, Dak., on Prophylactic Treatment of Eye Diseases.. 409
on Veratrum Viride..... 222
Ephedrine..... 72
Epilepsy..... 73
a Case of, Cured (apparently) by the Correction of an Error of Refraction, 125
Nitro-Glycerin in..... 165
Simulo in..... 528
Treatment of, by Means of Actual Cautery to the Scalp..... 312
Epistaxis, Hot Water in..... 552
Lemon Juice in..... 48
Epithelioma..... 43
Epitheliomata and Dermoid Vegetations, Thuya Occidentalis in the Treatment of..... 312
Ergot and Acetic Acid in Post-Partum Hæmorrhage..... 118
Effect of, on the Involution of the Uterus, 381
Hypodermic..... 430
Statistical Examination as to its Use in Parturition..... 553
in Polyuria..... 568
Ergotin in Suppositories in the Treatment of Uterine Fibromata 72
Erysipelas..... 43
the Mechanical Treatment of..... 383
Lanolin and Ichthyol in..... 568
Erythema..... 44
Erythrophleine—The New Anæsthetic..... 63
Escharotic, Sub-Benzoate of Bismuth an..... 23
Eternal Life..... 86
Etheridge, Dr. J. H., Chicago, Ill., on Vaginal Hysterectomy, Report of Three Cases..... 53
Ether, the Value of, During Anæsthesia..... 504
Ethics, the, of Washing Out the Stomach..... 264
Ethyl, Bromide of..... 24
Eucalyptus in Typhoid..... 143
Euphorbia Pilulifera in Spasmodic Croup..... 84
Evolution vs. Maternal Impressions, Arrest of.. 527
Examination of Patient..... 199
Exudate, a Tonsillar—What is it?..... 103
Eye Diseases, Prophylactic Treatment in..... 409

False Membranes, Forcible Removal of, and Cauterization of Throat in Diphtheria, are They to be Recommended?..... 137
Familiar Plants, the Therapeutic Study of..... 237
Fatty Heart, Treatment of..... 564
Febrifuge, Vernonia, a New..... 480
Fee, the Physician's..... 180
Feet, Treatment of Profuse Sweating of..... 255
Females, Irritable Bladder and Frequent Micturition..... 502
Treatment of Cystitis in..... 45
Femoral Hernia..... 315
Femur, Fracture of..... 385
Fenn, Dr. C. M., San Diego, Cal., on Dyslalia from Cigarette Smooking..... 484
Fever, Effects of Increased Temperature..... 179
the Use of Alcohol in..... 13
Fibro-Cystic Tumor Recovery, Laparotomy for, 462
Fibroid Tumors, Electricity in Treatment of.... 65
Fiction, the Therapeutical Value of..... 503
Fissured Nipples, Salol Collodion for..... 256
Flagler, Dr. W., Imlay City, Mich., on Pichi in Nephritis and Cystitis..... 419
Flatulent Dyspepsia, Treatment of.....375, 381

Page.

Florence, Treatment of Abortion in Obstetrical Clinic of... 95
Fœtal Death, Examination of Statistics with Reference to Influence of Ergot in Causing... 553
Fœtid Coryza, on the Treatment of... 93
Fogyism,... 344
Ford, Dr. A., Alton, Mich., on Maternal Impressions... 559
Foreign Doctors, Hard Times Among... 252
Force, Dr. J. F., Minneapolis, Minn., on Syrup Trifolium Comp. as an Alterative... 84
Fractures of the Femur... 385
Free Trade on Surgical Instruments... 107, 153
Fulton, Dr. C. M., Dawson, D. T., on the Medical and Surgical History of the War of the Rebellion... 34
Fumigation, Sulphurous Acid, in Whooping-Cough... 378
Fundus, Rupture of the Womb Through... 508
Furunculus... 44

Galactagogue, Jamborandi as a... 48
Galezowski's Anti-neuralgic Formula... 376
Gall-Stones, a Simple Method of Dissolving Impacted... 48
Olive Oil in the Treatment of... 263
Treatment of... 312
Gargle in Stomatitis... 48
Gastralgia, Extract of Coca in... 24
Gastric Affections, Diagnosis of... 516
Lavage in the Treatment of, 18
Catarrh... 520
Diseases, Chronic, Recent German Literature on... 235
and Pancreatic Juice and Bile, Influence of Condurago on the Secretion of... 456
Tonic, a Laxative... 72
Gavage and Incubation... 192
Gelsemium Sempervirens, Advantages of... 432
Genito-Urinary Tract, Cases Illustrating the Sedative Action of Pichi on... 524
Geranium Maculatum... 17
in Chronic Bronchitis... 192
German Medical Journal, Habit of... 373
Germans, Sir Morrell Mackenzie and the... 470
Germicides in the Internal Treatment of Disease, 163
Glandular Affections of the Neck, Calcium Chloride in... 429
Glycerin as a Surgical Dressing... 451
Clysters... 549
Glycerole for Pigmentary Spots on the Skin... 192
Gonorrhœa and Conception ... 82, 321
a New Treatment of... 480
a New and Rational Treatment of... 500
Cocaine in Painful Micturition of... 48
Mercury Biniodide in... 40
Therapy of... 261
Treatment of by Anthrophores... 189
Gonorrhœal Peritonitis... 292
Gout, a Pill for... 520
Cocaine in... 71
Grant, Dr. F. A., Wolcott, Ind., on Cheken in Pneumonia... 83
Graves, Dr. S. C., Grand Rapids, Mich., on Progressive Surgery... 217
"Grey Oil," Subcutaneous Injection of, in Syphilis... 307
Grindelia Robusta in Pertussis ... 71
Groner, Dr. F. J., Big Rapids, Mich., on Medical and Surgical History of the War of the Rebellion... 61
Gunsolus, Dr. Kenneth, Dundee Mich., on Was It Cholera?... 392

Hæmaturia Renalis of Bright's Disease, Pichi in, 82

Page.

Hæmoptysis, Iodoform in... 334
Hæmorrhage of the Lungs and All Dangerous Internal Hæmorrhages ... 350
Hæmorrhage, Post-Partum, Ergot and Acetic Acid in... 118
Uterine, Bryonia Dioica in... 120
Hæmorrhoids, Belladonna for... 33
Hæmothorax, a Case of, Following on Incised Wounds of the Thoracic Wall... 223
Hamamelis Virginica in Uterine Hemorrhage.. 114
Hay Fever, Successful Palliation of... 426
Therapeutics of... 308
Headache, a Remedy for... 376
a Prescription for... 256
Caused by Chronic Pharyngitis, Treatment of... 71
Treatment of by Nitro-Glycerin... 118
Head, Massage in Neuralgia of the... 240
Heart Disease, a New Remedy for... 408
Exercise in the Treatment of... 500
Fatty, Treatment of... 564
Heat Fever, Treatment of... 359
Heath, Christopher, London, Eng., a Clinical Lecture on Retention of the Urine, by... 485
Hemorrhage, Uterine, Hamamelis Virginica in, 114
Hydrastis Canadensis in, 519
Red Hawthorne in... 24
Henderson, Dr. T., Detroit, Mich., on a Case of Rupture of the Womb, Through the Fundus.. 508
Hepatic Colic Treated by Olive Oil... 47
Herdman, Dr. W. J., Ann Arbor, Mich., on the use of Electical Terms and Expressions ... 361
Heart Disease, Cactus Grandiflorus in... 480
Hernia, Radical Cure of... 135
Strangulated Inguinal, Reduction of by Taxis and Rectal Injections... 466
Umbilical... 29
Herpes... 44
Zoster... 520
Hiccough, Chlor-Anodyne in... 519
Hippurate of Lime... 64
Histology and Physiology, the Past Year's Work on, Having a Pathological or Clinical Bearing... 294
Hitchcock, Dr. Homer O., Obituary of... 540
Homatropine Hydrobromate... 138
Hornsby, Dr. N. L., St. Louis, Mo., on a Case of Rabies... 248
Hot-air Bath in Relation to Ptomaines and Leucomaines... 378
Inhalations in Phthisis... 444
Hot Saline Injections to Prevent Shock... 288
Water in Epistaxis... 552
Treatment of Carbuncle... 247
Human Cranium, Some Observations on the Formation of... 265
Humphrey, Dr. H. S., White Water, Wis., on Carbo-Oxygen Treatment for Consumption and other Forms of Wasting Diseases... 152
Hunter, Dr. George F., Holly, Mich., on Catarrhal Diphtheria ... 134
Huntingdon, Dr. W. C., Howell, Mich., on Pregnancy in a Dwarf with a Deformed Pelvis, 130
Hydrastis Canadensis... 377
in Uterine Hemorrhage... 519
on the Application of... 431
Hydriodic Acid, Its Use in General Practice... 306
Hydrochloric Acid, Convenient Combinations for administering in Dyspepsia... 167
Hydrofluoric Acid Gas in Phthisis... 46, 442
Hydrogen, Peroxide of, as a Remedial Agent... 106
Hydrophobia, a Successful Treatment of... 120
Cocaine in... 480
Hyoscin in Paralysis Agitans... 71

Page.

Hyoscyamine as a Hypnotic..... 455
in the Treatment of the Insane... 287
Hyperidrosis..... 44
Hypertension of the Arteries..... 354
Hypnotic, A, for Use in Alcoholism..... 256
Action of Boldin..... 119
Amylen Hydrate as a..... 328
Hyoscyamine as a..... 455
On the Use of Strychnine as a..... 94
Sulfonal, the New..... 253, 255, 444
Hypnotics..... 66
Hypnotism, The New..... 329
Hypodermatic Use of the Alkaloids..... 384
Hypodermic Administration of Stimulants..... 210
Ergot..... 430
Injections of Antiseptics..... 382
Calomel in Syphilis... 250
Chloride of Sodium in Collapse..... 48
Injection of Antiseptic Substances in Pulmonary Phthisis..... 432
Medication..... 185
Hypophosphites, Value of in the Treatment of Phthisis Pulmonalis, Tuberculosis, Scrofula, etc, 474

Ice Poultices, Reduction of Strangulated Hernia by, Without Taxis or the Knife..... 449
Ichthyol..... 24
and Lanolin in Erysipelas..... 568
Ichythosis..... 44
Impetigo Contagiosa..... 44
Incontinence of Urine, Nocturnal, Surgical Treatment of..... 502
Rhus Aromatica.... 567
Incubation and Gavage..... 192
Indian Hemp, Treatment of Migraine with, 355, 377
Indigestion and Lithiasis, The Neurotic Diathesis with..... 41
Infantile Eczema..... 360
Infants, Dyspepsia of..... 480
Infectious Diseases, Chronic, Treatment of..... 236
Inflammation of the Liver, Treatment of. 268
Inguinal, Strangulated, Hernia, Reduction of, by Taxis and Rectal Injections..... 466
Inhalation, Treatment of Ozœna by..... 256
Inhalations, Value of in the Treatment of Lung Diseases..... 479
Injections, Hot Saline, to Prevent Shock..... 288
Insane, Hyoscyamine in the Treatment of..... 287
Insanity in its Medico-Legal Aspects..... 299
Insect Bites, Treatment of..... 384
Insomnia, Treatment of..... 117
Intercostal Neuralgia, Osmic Acid, Hypodermically in..... 96
Intermittent Fever..... 410
Intestinal Antisepsis in Typhoid Fever..... 71
Antisepsis in Typhoid Fever..... 168
Injections, Technique of..... 239
Perforations, A Test for..... 263
Intra-Pulmonary Injections of Creasote..... 312
Intussusception, Surgical Treatment of;..... 429
Inunction and Nutritive Bath, The Value of.... 285
Iodides, Administration of..... 477
Iodoform and Menthol, A Spray of Hot Vaseline in Conjunction with, In the Treatment of Laryngeal and Pulmonary Phthisis.... 477
in Combination for Surgical Use..... 263
in Hæmoptysis..... 334
Iodol as a Substitute for Iodides and Iodoform.. 191
in Surgery Among Children..... 70
Ipecacuanha Spray..... 263

Page.

Iron, and Other Drugs, Cascara Sagrada in Solution with..... 503
a New Preparation of..... 72
Ivy, Dr. Tracy, Peoria, Texas, on Pichi..... 397

Jaborandi as a Galactogogue..... 48
as a Remedy in Snake Bites..... 47
and Pilocarpine, Action of..... 428
Jamaica Dogwood in Spasmodic Cough..... 96
Jambul in Diabetes, Clinical Notes on..... 242
Jarvis, Dr. H. C., Schell City, Mo., on Cascara Sagrada in Summer Diarrhœa..... 512
Jaundice, Catarrhal, Treated by Cold Water Enemata..... 36
Jenks, Dr. Edward W., Detroit, Mich.,
On a Description of Some New Instruments for Plastic Operations in the Vagina..... 274
On Some Points Relating to "Emmet's Operation," with a Description of a New Cervical Needle..... 289
Jequirity in a Case of Trachoma..... 134
Johns, Dr. Robert T., on the Prevention of Conception.....

Katalytic Action of Electricity—Its Practical Value in Rheumatic Affections..... 425
Kava-Kava, Therapeutic Application of..... 95
Kinney, Dr. J. R., Lynn, Mass., on Jequirity in a Case of Trachoma..... 134
Knife or Taxis, Reduction of Strangulated Hernia by Ice Poultices Without..... 449
Koumissed Peptones..... 46

Labor, Chloral as an Anæsthetic During..... 363
Management of Third Stage of..... 97
Antipyrine in..... 325
Lactic Acid in Diarrhœa..... 120
Lady or the Tiger..... 279
Lamellis, Pepsinum Purum in..... 336
Lanolin, Action of, on Micro-organisms..... 568
and Ichthyol in Erysipelas..... 568
Laparotomy for Fibroid-Cystic Tumor — Recovery..... 462
Laryngeal Tube, an Improved..... 149
and Pulmonary Phthisis, Menthol in, and in Other Diseases..... 91
and Pulmonary Phthisis, Treatment of, by a Spray of Hot Vaseline in Conjunction with Menthol and Iodoform..... 477
Latham, Dr. V. A., Ann Arbor, Mich., on Diseases of Children..... 366
Lavage in Children..... 168
in the Treatment of Gastric Affections.. 18
Leg, How to Treat Cramps in..... 133
Lemon Juice in Epistaxis..... 48
as a Prophylactic of Diphtheria..... 297
Leprosy, Is it Contagious?..... 36
Lett, Dr. Stephen, Guelph, Ont., on a Report on Some of the Newer Remedies..... 392
Leucomaines and Ptomaines, Hot-air Bath in Relation to..... 378
Lewis, Dr. E. R., Kansas City, Mo., on Dressing and Drainage..... 369
Lithuria..... 40
Lithiasis and Indigestion, the Neurotic Diathesis with..... 41
Life Insurance and Albuminuria..... 513
Lime, Hippurate of..... 64
Lipanine—A Substitute for Cod-Liver Oil..... 143
Liquor Sodii Ethylatis in the Treatment of Lupus..... 477
Lithia Water..... 155
Liver, Treatment of Inflammations of..... 268

Page.

Locher, Dr. Henry E., Grand Rapids, Mich., on Alcohol in Health and Disease..... 121
Lucre, Filthy..... 62
Ludwig, Dr. H. B., Richland, Mich., on a Tonsullar Exudate—What is It?..... 103
Lugol's Solution..... 352
Lung Diseases, Antiseptic Lozenges in..... 167
Value of Inhalations in the Treatment of..... 479
Cavities, the Treatment of..... 401
Lungs, Hæmorrhages of, and All Dangerous Internal Hæmorrhages..... 350
Lupus Erythematosus..... 44
Exedens Necessitating Amputation..... 244
Liquor Sodii Ethylatis in the Treatment of..... 477
Vulgaris..... 44
Lying, Luxury of Professional..... 558

Mackenzie, Sir Morell, and the Germans..... 470
M'Callum, Dr. H., London, Ont., on the Past Year's Work on Physiology and Histology Having a Pathological or Clinical Bearing.... 294
M'Coy, Dr. Wm. A., Madison, Indiana, on the Management of the Third Stage of Labor..... 97
Magill, Dr. J. W., Fairport, N. Y., on Pichi in Cystitis..... 512
Malarial Fever in Children..... 381
Malaria, Mullein in..... 548
Mammary Abscesses, Sponge Dressing for..... 238
Glands, Electricity Employed in Atrophy of..... 264
Manaca, Therapeutic Applications of..... 552
Man, the Beast.....251, 277
Massage in Neuralgia of the Head..... 240
Masturbation, an Appliance to Prevent..... 332
Maternal Impressions 537, 559
vs. Evolution, Arrest of.. 527
Mathis, Dr. C. E., Kansas City, Mo., on Pichi in Cystitis..... 398
Measles, a Case of, Followed by Meningitis.... 156
Medical Paupers..... 75
Reading and Medical Societies..... 34
Services, Compensation for..... 539
Societies and Medical Reading..... 34
and Therapeutics..... 35
and Social Culture..... 321
Witnesses, Fees for..... 249
Medicine, Address in..... 224
Administration of to Children..... 262
Alcohol in..... 245
Popular..... 105
the Phonograph and its Application in..... 492
Men, Kind of, who Succeed..... 346
Meningitis, a Case of Measles Followed by..... 156
in Children, Treatment of..... 256
Menorrhagia, Electricity in..... 22
Mental and Nervous Diseases, Systematic Active Exercises in..... 165
Menthol and Iodoform in Combination for Surgical Use..... 263
a Spray of Hot Vaseline in Conjunction with, in the Treatment of Laryngeal and Pulmonary Phthisis.. ... 477
in Laryngeal and Pulmonary Phthisis and in Other Diseases..... 91
Mercuric Alanine in Syphilis..... 215
Mercury Biniodide in Gonorrhœa..... 40
the Use of, in Surgery..... 240
Salicylate of, in Syphilis..... 190

Page.

Merz, Dr. Chas. H., Sandusky, O., on the Application of Electrolysis, 241
on Some Observations on the Formation of the Human Cranium..... 265
on Chorea..... 433
on Laparotomy for Fibrocystic Tumor—Recovery 462
Methylal in Delirium Tremens..... 168
Spray in Chorea..... 384
Use of, in Delirium Tremens..... 142
Michigan State Medical Society, Late Meeting of, 297
Microbe of Acute Articular Rheumatism..... 359
Micturition, Frequent, and Irritable Bladder in Females..... 502
Painful, of Gonorrhœa, Cocaine in, 48
Midwifery Antiseptic.....9, 80, 102, 131, 155, 177
Migraine, Treatment of, with Indian Hemp, 355, 377
a Remedy for..... 480
Milk Diet, Treatment of Acute Pleurisy by..... 432
Mitchell, Dr. Ray R., on Tonic Alterative Compounds..... 169
Mitral Obstruction..... 505
Molar, a Large..... 178
Morbid Nasal Irritability..... 228
Morden, Dr. W. R., Adrain, Mich., on Free Trade in Surgical Instruments..... 153
Morgan, Dr. G. F. G., San Francisco, Cal., on Uterine Inertia..... 133
Morphia, Phthalate of..... 24
Morse, Dr. W. H., Westfield, N. J., on Lithia Water..... 155
Mulheron, Dr. J. J., Detroit, Mich., a Clinical Lecture — Examination of the Patient, by..145, 199
on Epilepsy..... 73
on a Case of Lupus Exedens Necessitating Amputation..... 244
on Summer Diarrhœa of Children..... 337
on Intermittent Fever.... 410
on Dyspepsia, Sciatica and Phthisis..... 529
on Scarlet Fever..... 457
Mullein in Malarial Troubles..... 548
Muscular Rheumatism, Injections of Osmic Acid in..... 473

Naphthalin and Calomel in Typhoid Fever..... 46
Naphthol, Salol and Bethol..... 70
Nasal Mucous Membrane, Acute and Subacute Inflammation of, Reduced by Using Dr. Carl Seiler's Antiseptic Spray for..... 352
National Patho-Biological Laboratory..... 541
Neck, Calcium Chloride in Glandular Affections of..... 429
Nervous and Mental Diseases, Systematized Active Exercises in..... 165
Nerves and Womb..... 84
Nephro-lithotomy..... 59
Nephritis and Cystitis, Pichi in..... 419
Nephrectomy, a Case of..... 30
Neuralgia..... 352
a Remedy for..... 376
Chloride of Ammonium in..... 528
Intercostal, Osmic Acid Hypodermatically in..... 96
of the Head, Massage in..... 240
Pomade Against..... 456
Superficial..... 328
a Remedy for..... 520
Neurotic Diathesis, with Indigestion and Lithiasis..... 41

Page.

New Born, Should it be Washed?..... 372
Newer Remedies, a Report on Some of the..... 392
Nichols, Dr. T. B., Plattsburgh, N. Y.,
on Medical Societes and Social Culture..... 321
on Treatment of Scarlatina..... 371
on Maternal Impressions..... 537
Night Service in Drug Stores..... 159
Sweats, a Remedy for..... 240
Nipples, a Remedy for Cracked..... 256
Nitro-Glycerin in Epilepsy..... 165
Treatment of Headaches by..... 118
Nose, Treatment of Bleeding from..... 384
Nutrient and Sedative Enemata..... 480
Nutritive Bath and Inunction, the Value of..... 285

Obesity, Treatment of..... 565
Obstetric Practice, a Few Fatal Cases in..... 28
Corrosive Sublimate in..... 47
Some thoughts and Interrogations on..... 52
Obstetrical Clinic of Florence, Treatment of Abortion in..... 95
Old-Time Doctor..... 300
Oleander, Physiological and Therapeutic Properties of..... 336
Olive Oil in the Treatment of Gall Stones..... 263
Hepatic Colic..... 47
Oliver, Dr. James, on Pelvic Peritonitis..... 533
Operative Treatment of Pulmonary Abscess..... 475
Opium-poisoning, Transfusion and Atropine in, 173
Ophthalmic Surgery, Antiseptics in..... 316
Osmic Acid, Hypodermatically, in Intercostal Neuralgia..... 96
Injections of in Muscular Rheumatism..... 473
Owen, Dr. H. C., Baldwin, Kansas, on An Unique Case of Rupture of Uterus..... 557
Oxalate of Cerium in Sea-sickness..... 311
Oxygen Treatment..... 393
Oxytoxic, Ustilago Maidis as an..... 44
Ozæna..... 507
Treatment of by Inhalation..... 256

Padiera, Dr. G. W., Rochester, N. Y., on Alveloz Milk in Cancer..... 390
Palliation of Hay Fever, the Successful..... 426
Pancreatic and Gastric Juice and Bile, Influence of Condurango on the Secretion of..... 456
Paralysis Agitans, Hyoscin in..... 71
Two Cases of Bell's..... 558
Paraldehyde in Obstinate Vomiting..... 334
Parkes, Dr. Chas. T., Chicago, Ill., on a Case of Nephrectomy..... 30
Park, Dr. C. S, Hubbardston, Mich., on That Unusual Form of Typhoid Again..... 51
Dr. L. E., Tracy, Iowa, on Rötheln..... 278
Parosi's Hemostatic Collodion..... 352
Parson's Local Anæsthetic..... 376
Parthenicin..... 336
Pathology, the Subject of General and Gross... 87
Pelletierine in Tænia..... 240
Pelvis, Deformed, Pregnancy in a Dwarf with.. 130
Pelvic Peritonitis..... 533
Pemphigus, a New Treatment for Acute..... 451
Peppermint Water, Treatment of Pruritus Pudendi by..... 202
Pepsins, Comparative Value of..... 383
Pepsin in the Treatment of Diphtheria and Croup..... 541, 545
Pepsinum Purum in Lamellis..... 336
Peptones, Koumissed..... 46
Perchloride of Iron and Milk in the Treatment of Diphtheria..... 47, 239
Peritonitis, Pelvic..... 533

Page.

Peritonitis and Puerperal Convulsions..... 350
and Typhlitis, Saline Purgatives in the Treatment of..... 383
Gonorrhœal..... 292
Peroxide of Hydrogen as a Remedial Agent.... 106
Perry, Dr. A. L., New York, N. Y., on a Case Illustrating the Proper Mode of Administering Cascara Sagrada..... 164
Pertussis, Grindelia Robusta in..... 71
Pessaries..... 341
Boro-Glycerin for..... 14
Pharyngitis..... 64
Chronic, Treatment of Headache Caused by..... 71
Phenacetin..... 283
Application and Dose of..... 312
Phonograph and its Application in Medicine.... 492
in Physical Diagnosis..... 499
Phthalate of Morphia..... 24
Phthisis, a Cannabis Indica Mixture for..... 335
Agaricine in the Sweating of..... 335
Calomel in..... 551
Creasote Hypodermically in..... 304
For Inhalation in..... 72
Hot-Air Inhalations in..... 444
Hydrofluoric Acid Gas in..... 442
Incipient..... 530
Injection of Sterilized Air in the Treatment of..... 456
Laryngeal and Pulmonary, Menthol in, and Other Diseases..... 91
Laryngeal and Pulmonary, Treated by a Spray of Hot Vaseline in Conjunction with Menthol and Iodoform.... 477
Open-air Treatment of..... 564
Pulmonary, Hypodermic Injections of Antiseptic Substances in..... 432
Pulmonalis, Tuberculosis, Scrofula, Value of Hypophosphites in the Treatment of..... 474
Sodium Iodide in..... 304
Treated by Hydrofluoric Acid..... 46
Physic, Old..... 155
Physical Diagnosis, Phonograph in..... 499
Physician and Druggist, The Relation of, 418, 469, 489, 536
in Politics..... 398, 419
The Modern..... 414
Social Standing of..... 323
Physiological Action of Oil of Turpentine..... 47
Effects of Russian Baths..... 408
Physiology and Histology, The Past Year's Work on, Having a Pathological or Clinical Bearing..... 294
Phytolacca Decandra for Bronchocele..... 148
Pichi..... 72, 371, 397, 479, 552
Cases Illustrating the Sedative Action of on Genito-Urinary Tract..... 524
Fluid Extract, in Cystitis.. 343, 365, 398, 512
in Affections of the Urinary Passages..... 288
in Chronic Cystitis..... 186
in Hæmaturia Renalis of Bright's Disease, 82
in Nephritis and Cystitis..... 419
in Vesical Troubles..... 313, 492
The Value of..... 504
Pierce, Dr. N. H., Chicago, Ill., On A Case of Hæmato-Thorax Following an Incised Wound of Thoracic Wall..... 223
Pigmentary Spots on the Skin, Glycerole in.... 182
Pigmentations in Pregnancy..... 304
Pilocarpine and Jaborandi, Action of..... 428
Piscidia Erythrina..... 234
Placenta Prævia..... 178, 202, 483
Two Cases of..... 104

Page.

Placenta Prævia, the Treatment of..... 171
Retained, Treatment of, at the Rotunda Hospital, Dublin..... 69
The Removal of..... 298
Plastic Operations on the Vagina, a Description of Some New Instruments for..... 274
Pleurisy, Acute, Treatment of, by Milk Diet.... 432
Pneumonia, Causation and Prevention of..... 254
Cheken in..... 83
Digitalis in..... 143
Increasing Death-rate of..... 566
Liebermeister's Treatment of..... 214
Treatment of..... 454
Treatment of, with Tartar Emetic, 430
Poisonous Effects of Cigarette Smoking..... 431
Politics, the Physician in.....398, 419
Polyuria, Secale Cornutum in..... 568
Pomade Against Neuralgia..... 456
Pontius, Dr. C. R., Fremont, O., on Notes on Catarrh and its Effects on the System..... 78
Popular Medicine..... 105
Post Partum Hemorrhage, Ergot and Acetic Acid in..... 118
Postural Treatment of Constipation..... 427
Potassium, Bromide of, vs. Bromide of Sodium, 478
Pregnancy in a Dwarf with Deformed Pelvis.... 130
Pigmentation in..... 304
Rectal Injections of Carbonic Acid in the Treatment of Vomiting of.. 404
Vomiting in..... 550
Progressive Surgery..... 217
Prolapsus Uteri, Swedish Gymnastic Treatment of..... 186
Prophylactic of Diphtheria, Lemons as a..... 297
Measures Against Tuberculosis in Cattle..... 453
Treatment of Diphtheria..... 287
in Eye Diseases..... 409
Prostate, Cancer of..... 60
Pruritus Ani and Coccygodynia, a New and Reliable Remedy for..... 239
Pudendi, Treatment of, by Peppermint Water..... 262
Psoriasis, Treatment of..... 208
Ptomaines..... 373
and Leucomaines, Hot-air Bath in Relation to..... 378
Puerperal Convulsions and Peritonitis..... 350
Eclampsia..... 208
Fever—Is it a Preventable Disease .. 471
Infectious Diseases, the Causes of... 332
Pulmonary Abscess, Operative Treatment of... 475
Consumption, Sulphurous Acid Treatment of..... 187
Therapeutics of, by Debove's Method of Superalimentation... 89
and Laryngeal Phthisis, Menthol in, and in Other Diseases..... 91
and Laryngeal Phthisis, Treatment of, by a Spray of Hot Vaseline in Conjunction with Menthol and Iodoform..... 477
Phthisis, Hypodermic Injection of Antiseptic Substance in..... 432
Pyrogallic Acid in Eczema..... 513

Quebracho in Dyspnœa.....216, 233, 546, 552
in Surgical Practice..... 96
Quinine and Alcohol in the Treatment of Fever, 1
Quinsy, Cocaine in..... 504

Rabies, a Case of..... 248
Railway Accidents, Concussion Caused by 367

Page.

Randolph, Dr. R. L., Fairmont, La., on Fluid Extract Pichi in Cystitis..... 343
Raw Meat, Therapeutic Use of..... 69
Rectal Alimentation in Children..... 142
Injections of Carbolic Acid in the Treatment of Vomiting of Pregnancy..... 404
Medication for Children..... 287
Injections and Taxis, Reduction of Strangulated Inguinal Hernia by..... 466
Red Hawthorne in Uterine Hemorrhage..... 24
Refraction, a Case of Epilepsy Cured (apparently) by the Correction of an Error of..... 125
Regulation of Medicine by Law..... 10
Religio-Medici..... 422
Remedial Agent, Peroxide of Hydrogen as a... 106
Resection of Rib, Sub-periosteal, for Empyema in Children..... 3
Resorcin in Cancer..... 240
Respiratory Therapeutics..... 115
Retroflexion, a Radical Cure for, by a New Method..... 261
Retro-pharyngeal Abscess..... 5
Rheumatic Affections..... 64
Practical Use of Katalytic Action of Electricity... 425
Rheumatism, Acute..... 140
on the Value of Salol in the Treatment of..... 382
Treatment of with Salicylates..... 284
Cascara Sagrada in..... 345, 566
with Salicylate of Soda in..... 504
Chronic, a Remedy for..... 520
Microbe of Acute Articular..... 359
Muscular, Injections of Osmic Acid in..... 473
Rhus Aromatica and Chionanthus in Diabetes.. 528
Incontinence of Urine in..... 567
Robinson, Dr. W. F., Dresden, Saxony, on Basedow's Disease—Vomitus Hystericus..... 467
Rohe, Dr. George H., Baltimore, Md., on Cutaneous Manifestations of Syphilis..... 173, 193
Rosenberry, Dr. A. J., Wausan, Wis., on a Shot-Gun Prescription..... 83
on Conservative Surgery..... 101
on Spinal Irritation..... 100, 246
Rötheln..... 278
Rotunda Hospital, Dublin, Treatment of Retained Placenta at..... 69
Rupture of Uterus..... 557
Russian Baths, Action of on the Secretion of Milk in Suckling Women..... 48
Physiological Effects of..... 408

Saccharine..... 310
A Convenient Solution of..... 192
in Ammoniacal Urine..... 551
in Diabetes Mellitus..... 96, 144, 211
The Untoward Effect of..... 286
Saccharite of Cocaine..... 192
Salicylate of Bismuth..... 190
of Soda with Cascara Sagrada in Rheumatism..... 504
of Sodium in Tonsillitis..... 492
Salicylates, Treatment of Acute Rheumatism with..... 284
Saline Purgatives in the Treatment of Typhilitis and Peritonitis..... 383
Salol, Bethol, and Naphthol 70
Collodion for Fissured Nipples 256
On the Value of, in the Treatment of Acute Rheumatism..... 392
Tooth Powder..... 376

Page.
Salts, The Proper, To be Used in Making Solutions for Transfusion..... 502,
Salve for Chilblain..... 240
Savine in the Treatment of Cancer..... 96
Scalp, Treatment of Epilepsy by Means of Actual Cautery to..... 312
Scapula, Fracture of, Below the Spine..... 532
Scarlatina, Treatment of..... 371, 457
Sciatica..... 530
Scott, Dr. J. Z., Scandia, Kas., on Antipyrine..... 105
on Two Cases of Bell's Paralysis..... 558
Scrofula, Phthisis Pulmonalis, Tuberculosis, Value of Hypophosphites in Treatment of.... 474
Sea-Sickness..... 185, 562
Antipyrine in..... 311
Oxalate of Cerium in..... 311
Prevention of..... 312
Seborrhœa Oleosa..... 376
Secale Cornutum in Polyuria..... 568
Sedative and Antispasmodic, Collinsonia Canadensis, Fluid Extract as a..... 120
and Nutrient Enemata..... 480
Semolina in Diabetes..... 335
Sewer Gas, A Test for..... 72
Sex of the Child, How to Insure..... 515
Shall a Physician Deliver His Criminal Patient to the Authorities?..... 14
Shepherd's Purse..... 95
Hæmostatic Action of..... 209
Shock, Hot Saline Injections to Prevent..... 288
Shoemaker, Dr. M., Sioux City, Iowa, on Lemons as a Prophylactic of Diphtheria..... 297
Shot-Gun Prescription, A..... 83
Shoulder, Dislocation of..... 276, 533
Sick Children, The Feeding of..... 164
Simulo..... 552
in Epilepsy..... 528
Skin Diseases, Anthrarobin in..... 188, 191
Stimulants to be Avoided in..... 144
Treatment of Diseases of..... 43
Sleeplessness and Drugs..... 398
Treatment of..... 166, 259
Smith, Dr. Eugene, Detroit, Mich., on Cataract, 464
Snake Bites, Jaborandi as a Remedy in..... 47
Snuffing-Powder, a, for Coryza..... 96
Soap, a New Antiseptic..... 285
Social Culture and Medical Societies..... 321
Reform Question..... 396
Soda, Salicylate of, with Cascara Sagrada in Rheumatism..... 504
Sodium, Benzoate of, in Uræmia..... 96
Bromide of, Versus Bromide of Potassium..... 478
Iodide in Phthisis..... 304
Salicylate of, in Tonsillitis..... 492
the Treatment of Tonsillitis by..... 238
Solvent, a Reputed, for Cataract..... 452
Solvine..... 191
Southworth, Dr. J. W., Rochester, N. Y., on Pichi in Cystitis..... 365
Sparteine, Action of..... 190
Spasmodic Cough, Jamaica Dogwood in..... 96
Croup, Euphorbia Pilulifera in..... 84
Spermatorrhœa, Electro-Therapeutics in..... 192
Treatment of..... 384
Spinal Irritation..... 100, 201, 246
Spine, Fracture of Scapula Below..... 532
Spitzka, Dr. E. C., New York, on Spinal Irritation..... 201
Sponge Dressing for Mammary Abscesses..... 238
State Medicine at the Meeting of the American Medical Association..... 154

Page.
St. Clair, Dr. R. W., Brooklyn, N. Y., On How to Treat Cramps in the Leg..... 133
On Placenta Prævia..... 201
On Treatment of Urethral Stricture by Electrolysis..... 342
Steele, Dr. D. A. K., Chicago, Ill., a Clinical Lecture by..... 481
Sterilized Air, Injection of, in the Treatment of Phthisis..... 456
Stevens, Dr. J. V., Prairie du Sac, Wis., on Regulation of Medicine by Law..... 10
Stigmata Maidis..... 364
Still-Births, Vaso-Renal Changes as a Cause of, 538
Stimulants Hypodermic Administration of..... 210
to be Avoided in Treatment of Skin Diseases..... 144
St. Mary's Hospital Surgical Cases..... 290
Stomach Affections, Cocaine in..... 24
Cancer of, Another Case of Apparent Cure of, by Condurango..... 334
Condurango in the Treatment of Cancer of the..... 431
Stomachic, Condurango as a..... 96
Stomatitis, a Gargle in..... 48
Stomach, the Ethics of Washing Out..... 264
Washing in Children..... 114
Strangulated Hernia, Reduction of by Ice Poultices Without Taxis or the Knife, 449
Inguinal Hernia, Reduction of, by Taxis and Rectal Injections..... 466
Stricture of Urethra..... 291
Urethral, the Modern Treatment of... 116
Strong, Dr. Albert B., Chicago, Ill., on Subperiosteal Resection of Rib for Empyema in Children..... 3
Strophanthus, the Toxic Symptoms of..... 288
Diuretic Action of..... 568
Strychnine, Use of as a Hypnotic..... 94
Sub-benzoate of Bismuth, an Escharotic..... 23
Subcutaneous Injections of "Grey Oil" in Syphilis..... 307
Subperiosteal Resection of Rib for Empyema in Children..... 3
Suckling Women, Action of Russian Baths on the Secretion of Milk in..... 48
Sulfonal..... 288, 568
the New Hypnotic..... 253, 258, 444
Practical Observations on the Use of, 498
Untoward Action of..... 479
Sulphite of Aluminum—A New Antiseptic..... 515
Sulphurous Acid in Pulmonary Consumption.... 187
Fumigation in Whooping-Cough..... 378
Suppositories, Ergotine in, in the Treatment of Uterine Fibromata..... 72
Superalimenation, the Therapeutics of Pulmonary Consumption, by Debave's Method of.... 89
Surface, Dr. D. B., Bluff Creek, Ind., on Some Thoughts and Interrogations on Obstetric Practice..... 52
Dr. O B., on a Large Molar..... 178
Surgery Use of Biniodide of Mercury in..... 240
Surgical Dressing, Glycerin as a..... 451
Instruments, Free Trade in..... 107, 153
Notes—Emergency Hospital..... 465
Practice, Quebracho in..... 96
Sweating of the Feet, Profuse, Treatment of.... 255
of Phthisis, Agaricine in..... 335
Swedish Gymnastic Treatment of Prolapsus Uteri..... 186
Symptomatology of Typhoid Fever, the Differential..... 25
Syrup Trifolium Co. in Syphilis..... 61, 387
as an Alterative..... 84

Page.

Syrup Trifolium Co. in a Case of Syphilis..... 131
Syzygium Jambolana in Diabetes Mellitus....83, 119
Syphilis..... 98
Cutaneous Manifestations of.....173, 193
Hypodermic Injections of Calomel in, 250
Mercuric Alanine in..... 215
Salicylate of Mercury in..... 190
Subcutaneous Injection of "Grey Oil" in..... 307
Syrup Trifolium Co. in.....61, 131

Tackett, Dr. W. B., Lavaca, Ark., on Antiseptic Midwifery 155
on a Case of Measles Followed by Meningitis..... 156
Tænia, Pelletierine in..... 240
Tapeworm, Bettleheim Remedy for..... 64
a Remedy for..... 304
Talc, Treatment of Chronic Diarrhœa by..... 360
Tar, Syrup, in Winter Cough.. ..... 141, 189
Tartar Emetic, Treatment of Pneumonia with.. 430
Tattoo Marks, a New Method of Destroying.... 432
Taxis or the Knife, Reduction of Strangulated Hernia by Ice Poultices Without..... 449
Rectal Injections, Reduction of, Strangulated Inguinal Hernia by..... 466
Taylor, Dr. J. E., Richmond, Ind., on Cascara Sagrada, Formula of '87..... 556
Technique, the, of Antipyrine Hypodermically.. 24
of Intestinal Injections..... 239
Temperature of Fever, Effects of..... 179
Terebene in Bronchorrhœa..... 455
Pure, in the Treatment of the Advanced Stage of Uterine Cancer..... 48
Terebinthinates, Two New..... 216
Terebinthine Baths, Cheap and Effective..... 141
Tetanus, the Present State of..... 58
Thackeray, Dr. W. T., Chicago, Ill., on Syrup Trifolium Co. in a Case of Syphilis..... 131
Thayer, Dr. W. J., Brooklyn, N. Y., on Dietetics and Infant Feeding..... 197
The Emperor Frederick's Case..... 540
The Medical Witness..... 202
Therapeutical Value of Fiction..... 503
Therapeutic Indications for the Use of Cannabis Indica..... 525
Therapeutics and Medical Societies..... 35
Extra Routine..... 161
of Circumcision 333
Hay Fever 308
Respiratory..... 115
Therapy of Gonorrhœa..... 261
The Specialist and the General Practitioner..... 203
Thomas, Dr. H. M., Chicago, Ill., a Clinical Lecture by..... 505
Dr. P. E., Little Rock, Ark., on Euphorbia Pilulifera in Spasmodic Croup 84
Thoracic Wall, a Case of Hæmothorax Following an Incised Wound of..... 223
Throat, Cauterization of, in Diphtheria, and Forcible Removal of False Membranes—Are They to be Recommended?... 137
Thuja Occidentalis in Cancer. 528
in the Treatment by Dermoid Vegetations and Epitheliomata 312
Thyme for Whooping Cough..... 207
Tight Lacing..... 443
Tolu, Balsam of, as an Adjuvant to Creasote... 334
Tonic Alterative Compound..... 169
Laxative..... 520
Tonsillar Exudate, What is it?..... 103

Page.

Tonsils, Hypertrophied..... 507
Tonsillitis, Salicylate of Sodium in..... 492
Treatment of 20
Treatment of by the Salicylate of Sodium..... 238
Toothache, Chlor-anodyne in..... 264
Tooth Powder, Salol..... 376
Washes, Antiseptic..... 144, 352
Toxic Symptoms of Strophanthus..... 288
Tracheotomy Without the Canula..... 253
Trachoma, Jequirity in a Case of..... 134
Transfusion and Atropine in a Case of Opium-Poisoning..... 173
the Proper Salts to be Used in Making Solutions for..... 502
Trephining of Skull, Two Cases of..... 290
Trichinæ, Muscle Infiltrated by..... 230
Tripsin in Diphtheria..... 304
Tuberculosis in Cattle, Prophylactic Measures Against..... 453
Biniodide of Mercury Spray in... 567
of the Neck..... 482
Scrofula, Phthisis Pulmonalis, Value of Hypophosphites in the Treatment of..... 474
Tumor, Recovery, Fibro-Cystic, Laparotomy for, 462
Turpentine in Diphtheria.... 166
Oil of, Physiological Action of..... 47
Typhlitis and Peritonitis, Saline Purgatives in the Treatment of..... 383
the Medical Treatment of..... 264
the Treatment of..... 240
Typhoid, Antisepsis in..... 455
Eucalyptus..... 143
Fever..... 60
Alum in..... 144
Diet in the Convalescence of... 478
Intestinal Antisepsis in..... 71, 168
Naphthalin and Calomel in..... 46
Treatment of..... 212
That Unusual Form of, Again.. 51
the Differential Symptomatology of..... 25

Ulcers, a Remedy for Old..... 256
Treatment of Chronic..... 140
Umbilical Hernia..... 29
Unna's Treatment of Acne..... 260
Chronic Urethritis..... 23
Untoward Action of Sulphonal..... 479
Uræmia..... 420
Benzoate of Sodium in..... 96
Uræmic and Eclamptic Convulsions in Children, Treatment of..... 379
Ureter, Male, Exploratory Catheterization of the..... 310
Urethral Stricture, Treatment of, by Electrolysis, 342
the Modern Treatment of... 116
Urethritis, Chronic, Unna's Treatment of..... 23
Uric Acid Calculi, the Problem of Dissolving... 139
Urine, Clinical Lecture on Retention of..... 485
Incontinence of, in Children..... 350
Urinary Passages, Pichi in Affections of..... 288
Ustilago Maidis as an Oxytocic 44
Uterine Cancer Pure Terebene in the Treatment of the Advanced Stage of..... 48
Fibroids, Non-Operative Treatment of, 135
Fibromata, Ergotin in Suppositories in the Treatment of..... 72
Hæmorrhage, Bryonia Dioica in..... 120
Red Hawthorn in..... 24
Hydrastis Canadensis in, 519
Hamamelis Virginica in, 114
Inertia..... 133

Page.
Uterus, Effect of Ergot on the Involution of the, 381
Rupture of..... 508, 557

Vagina, a Description of Some New Instruments for Plastic Operations of the..... 274
Vaginal Hysterectomy, Report of Three Cases.. 53
Lotion..... 351
Vaginismus and Vaginitis, a Local Treatment for..... 331
Cocaine Locally in..... 479
Medical Treatment of..... 120
Vaginitis..... 208
and Vaginismus, a Local Treatment for..... 331
Valin, Dr. Chas. N., Belœil, Quebec, on the Treatment of Placenta Prævia..... 171
Varicocele, the Radical Cure of..... 67
Vaseline, Hot, a Spray of, in Conjunction with Menthol and Iodoform, in the Treatment of Laryngeal and Pulmonary Phthisis..... 477
Vaso-Renal Changes as a Cause of Still-Births.. 538
Veratrum Viride..... 222
Veronin, a New Cardiac Poison..... 286
Vernonia, a New Febrifuge..... 480
Vesical Irritation, Pichi in..... 313
Troubles, Pichi in..... 492
Viburnum Prunifolium in Threatened Abortion, 214
Vomiting, Obstinate, Paraldehyde in..... 334
of Pregnancy..... 550
Rectal Injections of Carbonic Acid in the Treatment of..... 404
Vomitus Hystericus—Basedow's Disease..... 467

Walker, Dr. H. O., Detroit, Mich., on St. Mary's Hospital Surgical Cases..... 290
Ward, Dr. E. B., Laingsburg, Mich.,
On Antiseptic Midwifery.....9, 102, 177
On the Bergeon Treatment..... 243
On the Late Meeting of the Michigan State Medical Society..... 297
On the Luxury of Professional Lying..... 558
War of the Rebellion, Medical and Surgical History of.....34, 61

Page.
Warts and Corns, a Remedy for..... 328
Colorless Collodium Salicylicum for..... 256
Treatment of by Internal Administration of Arsenic..... 117
Water-Filter, a Simple and Efficient..... 335
Watkins, Dr. A. F., Potosi, Mo., on Chloral as an Anæsthetic During Labor..... 363
Waxham, Dr. F. E., Chicago, Ill., on An Improved Laryngeal Tube..... 149
West, Dr. J. E., St. Clairsville, O., on Salicylate of Sodium in Tonsilitis..... 492
White Swelling, Treatment of, by Electricity... 335
Whitford, Dr. D. H., Elgin, Ill., on Antiseptics in Opthalmic Surgery..... 314
Whooping-Cough, Sulphurous Acid Fumigation in..... 378
Thyme for..... 207
Williams, Elkanah, the Death of..... 494
Dr. G. A., Bay City, Mich., on the Treatment of Anæmia.....389, 468
Winter-Cough, Syrup of Tar in..... 189
Witherspoon, Dr. R. G., Holland's Store, S. C., on Syrup Trifolium Co. in Syphilis..... 61
Womb and Nerves..... 84
Rupture of, Through the Fundus..... 508
Wound, Treatment of Without Drainage..... 501
Wrist Joint, Injury to..... 275
Wyman, Dr. Hal C., Detroit, Mich., on Amputation of Breast—Fracture of Scapula Below the Spine—Dislocation of the Shoulder—Ecchymosis..... 531
On Cancer of the Breast..... 435
On A Clinical Lecture..... 275
Clinical Lectures by..... 314
On Fracture of the Femur..... 385
On Notes an Abdominal Surgery..... 49
On Surgical—Emergency Hospital..... 465
On Transfusion and Atropine in a Case of Opium-poisoning..... 173

Yellow Fever, Treatment of..... 406
Yemans, Dr. C. C., Detroit Mich., on Syphilis, 98